



# **How and why veganism came to Finland: a case study using memetics**

Jolanda Riissanen

Examensarbete / Bachelor's Thesis

Mediekultur / Culture and Arts

2021

EXAMENSARBETE	
Arcada	
Utbildningsprogram:	Mediekultur
Identifikationsnummer:	20055
Författare:	Jolanda Riissanen
Arbetets namn:	How and why veganism came to Finland: a case study using memetics
Handledare (Arcada):	Owen Kelly
<p>Sammandrag:</p> <p>Detta examensarbete försöker förklara med hjälp av mem teori och genom frågorna Hur sprids en idé?, Vad är det som gör att en specifik idé sprids och inte någon annan?, Var det distributörer eller konsumenter som stod bakom populariteten? och Är det ett mem som styr både distributörer och konsumenter? hur och varför veganismfenomenet kom till Finland. Målet med detta examensarbete är att bidra till diskussionen om, och möjliga sätt för, användningen av mem teori för att analysera olika kulturfenomen i världen. Examensarbetet är avgränsat till Finland på grund av att det är området av intresse och på grund av den begränsade tidsramen för utförandet av arbetet samt den begränsade tillgången till material och interjvuobjekt inom samma tidsram. Undersökningsmaterialet består av litteraturöversikt och intervjuer. Den huvudsakliga teorin som används är mem teori. Resultatet tyder på att en idé sprids genom imitation och att en idé som sprids är ett mem som har vunnit över andra mem. Frågan har ändrat från att endast ha att göra med olika djurs välmående till att ha att göra med olika djurs välmående, att rädda världen och människors hälsa. Till diskussionen har det även kommit nya ord, till exempel reducetarian och flexitarian, som behöver tas i beaktande. Att äta mindre kött eller att bli vegan kanske inte är ett enda mem, utan snarare en grupp mem som arbetar tillsammans: ett memplex.</p>	
Nyckelord:	Memer, kulturfenomen, kulturevolution
Sidantal:	56
Språk:	Engelska
Datum för godkännande:	1.6.2021

DEGREE THESIS	
Arcada	
Degree Programme:	Media and Arts
Identification number:	20055
Author:	Jolanda Riissanen
Title:	How and why veganism came to Finland: a case study using memetics
Supervisor (Arcada):	Owen Kelly
Abstract:	
<p>This thesis aims to explain how and why veganism came to Finland with the help of memetics through the questions: How does an idea catch on?, What makes a specific idea catch on and not others?, Was the popularity driven by distributors or consumers? and Is it a meme that is driving both distributors and consumers?. The purpose of this thesis is to contribute to the discussion about, and possible ways of, using the memetic perspective to analyse different cultural phenomena in the world. The thesis is limited to Finland due to it being the area of interest and the limited timeframe available for the completion of the thesis as well as the limited access to data and interviewees during the same timeframe. The research material consists of a literature review and interviews. The main theory being used is memetics. The results suggests that an idea catches on through imitation and that a specific idea that catches on is a meme that have won in the competition between other memes. Rather than it being the distributors or consumers that have made the trend explode, the question has shifted from being only about animals to include animal welfare, saving the Earth and one's own health. New terms have been added to the debate, such as reductarian and flexitarian. We might see that the behaviour to consume less meat or become vegan is not only one meme, but rather a group of memes working together: a memplex.</p>	
Keywords:	Memes, cultural phenomena, cultural evolution
Number of pages:	56
Language:	English
Date of acceptance:	1.6.2021

# CONTENTS

<b>1</b>	<b>Introduction.....</b>	<b>7</b>
1.1	Observations .....	7
1.2	Purpose and research questions.....	7
1.3	Demarcation .....	7
<b>2</b>	<b>Background.....</b>	<b>8</b>
2.1	Definition.....	8
2.2	Timeline .....	9
<b>3</b>	<b>Theoretical framework.....</b>	<b>15</b>
3.1	How ideas have a life of their own.....	15
3.1.1	<i>Evolutionary algorithm</i> .....	15
3.1.2	<i>Replicator</i> .....	16
3.1.3	<i>Meme</i> .....	18
3.1.4	<i>Imitation</i> .....	20
3.2	How memes spread.....	21
3.2.1	<i>Altruism</i> .....	21
3.2.2	<i>Altruism trick</i> .....	22
3.2.3	<i>Memplexes</i> .....	23
3.2.4	<i>The people, the message, the context</i> .....	23
<b>4</b>	<b>LITERATURE RESEARCH .....</b>	<b>28</b>
4.1	Contributing memes .....	28
4.1.1	<i>“Karppaaminen”</i> .....	28
4.1.2	<i>Flexitarian diet</i> .....	32
4.2	Contributing events.....	32
<b>5</b>	<b>EMPIRICAL RESEARCH .....</b>	<b>34</b>
5.1	Producers .....	34
5.1.1	<i>Hoviruoka</i> .....	34
5.1.2	<i>Atria</i> .....	36
5.2	Retailers .....	37
5.2.1	<i>S-group</i> .....	37
5.2.2	<i>The Central Finnish Cooperative Society</i> <i>(Suomen Osuuskauppojen Keskuskunta, SOK)</i> .....	38
5.3	Consumers .....	39
<b>6</b>	<b>DISCUSSION &amp; CONCLUSION .....</b>	<b>41</b>

<b>7 FUTURE RESEARCH .....</b>	<b>44</b>
<b>References .....</b>	<b>45</b>

## Figures

<b>Figure 1.</b> Google Trends search interest for the topic 'veganism' and the search terms 'vegaani' and 'vegan' in Finland (food & drink category), between January 1 <sup>st</sup> , 2005 and January 1 <sup>st</sup> , 2021 .....	9
<b>Figure 2.</b> Google Trends search interest for the topic 'veganism' and the search terms 'vegaani' and 'vegan' in Finland (all categories), between January 1 <sup>st</sup> , 2005 and January 1 <sup>st</sup> , 2021 .....	10
<b>Figure 3.</b> Google Trends search interest for the topic 'veganism' and the search term 'vegan' worldwide (food & drink category), between January 1 <sup>st</sup> , 2005 and January 1 <sup>st</sup> , 2021 .....	10
<b>Figure 4.</b> Google Trends search interest for the topic 'veganism' and the search term 'vegan' worldwide (all categories) between January 1 <sup>st</sup> , 2005 and January 1 <sup>st</sup> , 2021.....	11
<b>Figure 5.</b> Oatly's packaging in 2012 .....	12
<b>Figure 6.</b> Oatly's packaging after rebranding .....	13
<b>Figure 7.</b> Diagrams that show the cumulative incidence of influenza and the daily incidence of influenza between the random students and their chosen friends.....	25
<b>Figure 8.</b> Google search results for the word "Karppaus" between January 1 <sup>st</sup> , 2000 and January 1 <sup>st</sup> , 2006.....	29
<b>Figure 9.</b> Google search results for the word "Karppaus" between January 1 <sup>st</sup> , 2000 and January 1 <sup>st</sup> , 2008.....	30
<b>Figure 10.</b> Google search results for the word "Karppaus" between January 1 <sup>st</sup> , 2000 and January 1 <sup>st</sup> , 2009.....	31

# 1 INTRODUCTION

## 1.1 Observations

As a frequent customer in grocery stores like Alepa and K-Market, I have observed an interesting change during the past few years: a great number of vegan products have suddenly appeared on the store shelves. A few years back, one had to go to special stores like Ekokauppa Ekolo, Kuudes maku, Ruohonjuuri or Vegekauppa to find a reasonable selection of vegan food (Vegaaniliitto ry 2020). This development puzzled me, and I began to research it. Eventually my research led me to meme theory.

## 1.2 Purpose and research questions

In researching this phenomenon, I began with a series of questions. When, how and why did the change happen? Who set it in motion? Why did this change succeed as it appears to have done? The purpose of this thesis is to contribute to the discussion about, and possible ways of, using the memetic perspective to analyse different phenomena in the world. My thesis will focus on looking at a specific phenomenon, veganism, and trying to explain how it came to Finland and why it did, by using the memetic perspective.

My research questions are:

RQ1: How does an idea catch on?

RQ2: What makes a specific idea catch on and not others?

RQ3: Was the sudden popularity of veganism driven by distributors or consumers?

RQ4: Is veganism a meme that is driving both distributors and consumers?

## 1.3 Demarcation

The thesis focuses on Finland, due to it being the area of interest and the limited timeframe available for the completion of the thesis as well as access to data and interviewees during the same timeframe. The scale is sufficient as it is not too big nor too small.

Research material has been gathered from between 2002 and 2020 as it gives a comprehensive picture of events leading up to what seem to be the most important years and showing when the trend might have come to Finland.

## **2 BACKGROUND**

### **2.1 Definition**

Before analysing this phenomenon, we need to have a clear understanding of the topic being discussed. What is veganism? What does it mean that a person is vegan? There are different ways to define these terms. The Cambridge Dictionary (2020a) has described a person who is vegan as “a person who does not eat or use any animal products, such as meat, fish, eggs, cheese, or leather” and the Merriam-Webster Dictionary (2020) explains a vegan person as “a strict vegetarian who consumes no food (such as meat, eggs, or dairy products) that comes from animals” as well as someone who “abstains from using animal products (such as leather)”. The PETA (2020), or People for the Ethical Treatment for Animals, characterize a vegan person as follows: “A vegan (strict vegetarian) does not consume meat, dairy products, eggs, honey, or any product derived from an animal. [...] Vegans don’t wear leather, fur, silk, or wool. Many refuse to use products that are made with animal ingredients, products that are filtered using animal parts (such as some wines, beers, and white sugars), and products that have been tested on animals.”

Veganism is defined by the Cambridge Dictionary (2020b) as “the practice of not eating or using any animal products, such as meat, fish, eggs, cheese, or leather: Strict veganism prohibits the use of all animal products, not just food, and is a lifestyle choice rather than a diet”, and by the Oxford Advanced Learner's Dictionary (2020) as “the practice of not eating or using any animal products, including meat, milk, leather, wool, etc.”

Finally, The Vegan Society, a limited company founded in 1944 (The Vegan Society 2020a) describes veganism like this: “Veganism is a way of living which seeks to exclude, as far as is possible and practicable, all forms of exploitation of, and cruelty to, animals for food, clothing or any other purpose. There are many ways to embrace vegan living. Yet one thing all vegans have in common is a plant-based diet avoiding all animal foods such as meat (including fish, shellfish and insects), dairy, eggs and honey - as well as



avoiding animal-derived materials, products tested on animals and places that use animals for entertainment.” (The Vegan Society 2020b)

## 2.2 Timeline

Google Trends show that veganism has gradually been rising in popularity worldwide during the last ten years. The first two pictures below (see fig. 1 and 2) illustrate the search interest for the topic 'veganism' and the search terms 'vegaani' and 'vegan' between January 1st, 2005 and January 1st, 2021 in Finland in the 'food & drink' category and in 'all categories'.

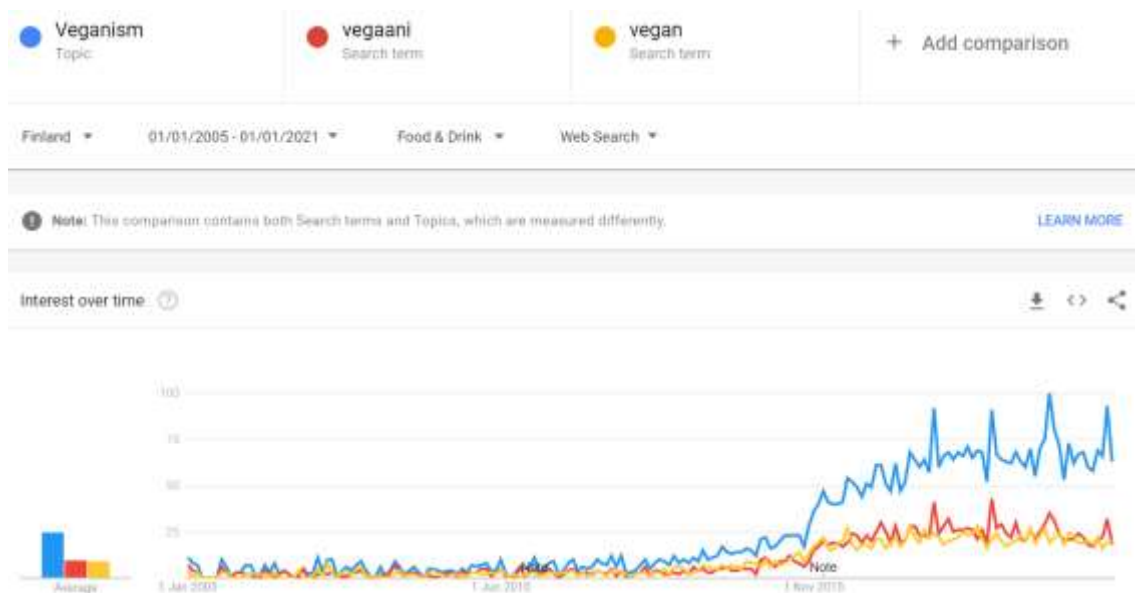


Figure 1. Shows the search interest for the topic 'veganism' and the search terms 'vegaani' and 'vegan' in Finland, in the food & drink category, between January 1<sup>st</sup>, 2005 and January 1<sup>st</sup>, 2021.



Figure 2. Shows the search interest for the topic 'veganism' and the search terms 'vegaani' and 'vegan' in Finland, in all categories, between January 1<sup>st</sup>, 2005 and January 1<sup>st</sup>, 2021.

The following two pictures (see fig. 3 and 4) show the search interest for the topic 'veganism' and the search term 'vegan' between January 1st, 2005 and January 1st, 2021 worldwide in the 'food & drink' category and in 'all categories'.



Figure 3. Shows the search interest for the topic 'veganism' and the search term 'vegan' worldwide, in the 'food & drink' category, between January 1<sup>st</sup>, 2005 and January 1<sup>st</sup>, 2021.



Figure 4. Shows the search interest for the topic 'veganism' and the search term 'vegan' worldwide, in the 'all categories' category, between January 1<sup>st</sup>, 2005 and January 1<sup>st</sup>, 2021.

Google Trends measure Search terms and Topics differently, which makes these numbers indicative, not absolute. Nevertheless, they demonstrate a general shift in interest of veganism. We can see this shift occurring in a number of important steps.

In the 1970's, Rickard Öste, one of the founders of Oatly AB, realized that there was a business opportunity for whoever managed to create an alternative to cow's milk. He got inspired by Arne Dahlqvist, a professor at Lund University who in 1963 had discovered lactose intolerance, a condition that makes it impossible for certain people to properly digest the sugar (lactose) in cow milk. However, it was not until the end of the 1980's that Öste and his team began researching the possibilities. In the end, they concluded that oats had potential in being used as an alternative to cow's milk. In 1994, Öste and his research team founded Ceba Foods, which later became Oatly. Although the company managed to develop a small following and grew, the brand grew into something the current Creative Director at Oatly, John Schoolcraft, has described as a "Dutch multinational, just indistinguishable from anything else on the shelves" (see fig. 5). (eatbigfish. 2016; IBS Center for Management Research 2020; Lewitschnik 2019; TIME USA LLC. 2018; Oatly 2018; Oatly 2020a)



Figure 5. Oatly's packaging in 2012. Source: eatbigfish. (2016).

This changed in 2012 when the board of directors at Oatly wanted a new vision for the company. They hired Toni Petterson, an entrepreneur with no background in the food industry, to become the C.E.O. of Oatly. He, together with Schoolcraft, re-branded the company by changing their main communication tool, the package, as well as the vision of the company and the company structure itself. The packaging got a new layout (see fig. 6). The company examined its roots, people who are lactose intolerant or vegan, and changed their core values to focus on nutritional health, sustainability, and transparency. Oatly went from a processing company to a lifestyle and challenger brand (eatbigfish. 2016; The Challenger Project 2016; Hitchens 2018; Lewis 2018; Murray 2019)



Figure 6. Oatly's packaging after the re-branding. Source: eatbigfish. (2016).

In 1995, Merja Scharlin invented the product Yosa by accident (Schildt 2020). She had always been passionate about organic food and health and started her own juice station in Piispanristi in the municipality of Kaarina. Scharlin heard about a university professor named Hannu Salovaara who was researching the fermentation of oats. Salovaara had tried pitching his idea to big food companies, but they were not interested, arguing that developing a product based on Salovaara's idea was too expensive and time consuming. However, Merja Scharlin became interested and wanted to know about the method and called Salovaara until he agreed to a meeting. The professor noticed her determination and agreed to put the idea to the test. Scharlin began testing by combining lactic acid bacteria and oats, but did not get any solid results. One night, Merja Scharlin left the remaining bacteria in a jar in the cold room and went home. A few months later, in the forgotten jar with four different bacteria and some oat goo, Yosa was born. (Viilo 2017, Schildt 2020)

If we jump twenty years ahead, various companies have started to launch vegan products. In April 2015, IKEA launched a vegan version of their meatballs (Nyt.fi toimitus HS 2015) and in autumn the same year, Hoviruoka Oy, a company producing ready-to-eat meals, launched 'Vihis Kasvispiirakka', a vegan pastry, which sold out in many stores in

the beginning and reached a popularity that surprised Hoviruoka themselves. (Parkkinen 2015; Ojanperä 2016; Niiniaho 2019)

In 2016, Paulig Group bought 51 percent of Gold&Green Foods' stocks and launched Pulled Oats® (Nyhtökaura®) in May the same year. (Forsell 2016; Ziemann 2016) Paulig Group is an international company and home to different brands that are based in different countries, for example Paulig and Gold&Green in Finland, Santa Maria and Risenta in Sweden and Poco Loco in Belgium. (Oy Gustav Paulig Ab 2020; Gold&Green Foods Ltd. 2020b; Santa Maria 2020; Risenta AB 2020; Paulig Group 2020a; Paulig Group 2020b)

In autumn 2016, another vegan innovation was launched, called Härkis®, by the company Verso Food Oy (Ziemann 2016). The first ready-to-eat product line in Finland, "Jokaiselle", was launched in Vegekauppa October 25<sup>th</sup>, 2016, in S-group stores October 26<sup>th</sup>, 2016 and in selected K-market stores November 1<sup>st</sup>, 2016 (Vegaanituotteet 2016).

Oy Karl Fazer Ab bought Bioferme in March 2017. Simultaneously, Fazer also started a new production line called Lifestyle Foods, which focuses on non-dairy grain products, plant-based meals and on-the-go snacking. Bioferme is a Finnish company established in 1977, specialized in fermentation-based oat products and is behind the oat snack Yosa. (Kamppila 2017; Reku 2017; Cision News 2017)

In May 2017, Kaslink Foods Oy begins the production of plant-based products and launches its oat-based brand Kaslink Aito. In August 2019, Kaslink Foods Oy becomes a part of Fazer Lifestyle Foods. (Pape-Mustonen 2017; Oy Karl Fazer Ab 2020b; Oy Karl Fazer Ab 2020c)

Juustoportti, a dairy company, began producing oat drinks in January 2018 and launched their first oat drink in February the same year (Tuominen 2017).

Valio Ltd, a Finnish business that mainly focuses on milk (Valio Ltd 2019), also joined the vegan market in February 2018 by launching the Valio Oddlygood™ product range: the Valio Oddlygood™ oat drink and Valio Oddlygood™ gurts in various flavours. The Oddlygood™ gurt is similar to a yoghurt, but made with oats. (Valio Ltd 2017).

In August 2018, Atria PLC (Public Limited Company), a Finnish food company that primarily offers different kinds of meat (Atria Suomi Oy 2020), launched Vegyu, a new vegan product line (Atria Suomi Oy 2018a).

Kellogg's, an American food manufacturing company known for their breakfast cereal, launched a new vegan line of cereals named W.K. Kellogg in the United Kingdom in 2018. (Kellogg Co. 2019; KELLOGG Company 2020a)

The British bakery chain Greggs launched a vegan-friendly sausage roll “Vegan Sausage Roll” on January 3rd, 2019 (Young 2019).

Burger King launched a plant-based Impossible Whopper in August 2019 (Lucas 2019).

These examples hint at a certain change in the food industry in Finland. Something happened that made all these companies start to invest in vegan products. This trend is not limited to only Finland, though, as indicated by the IKEA, Oatly and Kellogg's examples.

### **3 THEORETICAL FRAMEWORK**

#### **3.1 How ideas have a life of their own**

How did the change in supply of vegan products happen? Why did grocery stores suddenly begin to offer a larger range of vegan products? I will try to explain this with the help of memetics or meme theory. Let us go to the beginning.

##### **3.1.1 Evolutionary algorithm**

About a hundred and sixty years ago, Charles Darwin presented, in his book *On the Origin of Species by Means of Natural Selection* (1859), a theory of evolution by natural selection that explained the process of evolution without a designer. His theory indicates that if certain conditions are met, evolution is bound to happen. These conditions have to do with variation, selection and retention (or heredity). All creatures cannot be identical, they cannot all survive in a specific environment, but some need to do better than others, and there must be a process by which offspring inherit characteristics from their parents. This is how individuals who have characteristics that help them survive increase in the population and how natural selection works.

The American philosopher Daniel Dennett (1995) sees the evolutionary process as an algorithm, that is, a mindless operation that must produce an outcome. As an algorithm is

mindless, there is no host or mind executing the result. It just happens. Dennett also describes this as “a scheme for creating Design out of Chaos without the aid of Mind” (1995, p. 50). This evolutionary algorithm happened to create us from the starting material it had at hand. As evolution is only run once, we cannot know if or how it could have gone differently. As there is no next time, we only know it ended up with more than it started with.

Does this evolutionary process progress in any way? According to Gould (1996) it does not, while Blackmore (1999) argues that there is progress, but not towards anything. There has been progress in the sense that once there was only a primeval soup and now there are different organisms with varying complexity (Smith & Szathmary 1995).

### **3.1.2 Replicator**

Richard Dawkins argued in his book “The Selfish Gene” (1976) that evolution is a competition between genes. This became known as the selfish-gene theory.

Here I want to highlight the meaning of the word “selfish” in this context. A selfish gene does not mean that the gene has an agenda, a will, but rather “genes that do x are more likely to get passed on”. Dawkins also introduced the difference between a “replicator” and its “vehicle”. A replicator is anything of which copies are made, while a vehicle is the entity that interacts with the environment. Blackmore (1999) describes a replicator as something that can advance the evolutionary algorithm based on variation, selection and retention (or heredity).

Dawkins (1976) introduced three criteria for a successful replicator: fidelity, fecundity, and longevity. This means that a good replicator must be copied accurately, many copies must be made, and the copies must last a long time – although there may be trade-offs between the three.

Genes are good at all of these. They are high-quality replicators. Genes get copied quite accurately with the exception of some mutations, but these mutations contribute to the variation that is essential for evolution.

Genes are also high in numbers, although the fecundity varies with the kind of environment a species inhabits. There are two generalized life-history strategies proposed by American ecologist Robert MacArthur and American biologist Edward O. Wilson: r-selection and K-selection. These are the extremes at a selection continuum. Species



belonging to the r-selection are defined by numerous small offspring followed by exponential population growth when resources allow. Examples of r-selection are rabbits and flies. K-selection include species that live in stable environments where there is heavy competition for limited resources. Elephants and humans belong to this category and these conditions favour large size, long life and small numbers of well-cared-for offspring. (Rafferty 2011a; Rafferty 2011b)

Furthermore, genes are long-lived, almost immortal since they are passed on from generation to generation to generation. Our most familiar replicator now is DNA, although the original replicator was most likely a simple self-copying molecule in the primeval soup. Genes are the selfish replicators that drive the biological evolution here on earth, but Richard Dawkins suggested that a more basic principle also exists, one that implies that “all life evolves by the differential survival of replicating entities” (1976, p. 192). This basic principle is a general theory of evolution, something American psychologist Donald Campbell (1960, 1965) explained could be applied to more than one kind of evolution, for example organic or biological evolution and cultural evolution, because they all are evolving systems that adhere to the characteristics of natural selection. General evolutionary theory describes how design is created through the competition between replicators.

In 1981, Edward O. Wilson, the founding father of sociobiology (which studies the genetic and evolutionary basis of behaviour), and the physicist Charles Lumsden developed a theory of gene-culture coevolution and introduced the concept of the “cultorgen” as “the basic unit of inheritance in cultural evolution” (Lumsden and Wilson 1981). However, they always come back to the genes as the final deciders. If maladaptive culturgens are sometimes selected this is because their harm is not immediately apparent and so there is some lag before the system adapts. As they put it – “the genes hold culture on a leash”. In the end, it is the genes that benefit.

Geneticists Luigi Cavalli-Sforza and Marcus Feldman (1981) developed a detailed model of cultural transmission based on the “cultural trait” as the unit. Cultural traits are learned by imprinting, conditioning, observation, imitation or direct teaching. They clearly distinguish cultural selection from natural selection, and they use the concept of “cultural fitness” – that is, the fitness for survival of a cultural trait itself.

However, Cavalli-Sforza and Feldman still see “cultural activity as an extension of Darwinian fitness” (1981, p. 362), and do not consider the possibility that “it is the cultural items themselves that benefit from the adaptations they exhibit” (Dennett 1997, p. 7). In other words, they too believe in the leash.

Genes can keep culture on a leash, culture can keep the genes on a leash, or the two may evolve in competition or mutuality (Richerson and Boyd 1989).

Dawkins also complained that his colleagues in the end always wished to go back to “biological advantage” (Dawkins 1976, p. 193).

### **3.1.3 Meme**

Dawkins (1976) asks at the end of his book “The Selfish Gene” the question “Are there any other replicators on our planet?” and answers “Yes.”

This other replicator got the name “meme”, coined by Dawkins.

“We need a name for the new replicator, a noun that conveys the idea of a unit of cultural transmission, or a unit of imitation. ‘Mimeme’ comes from a suitable Greek root, but I want a monosyllable that sounds a bit like ‘gene’, I hope my classicist friends will forgive me if I abbreviate mimeme to meme.”

What is a meme? Richard Dawkins has likened a meme to a virus, but by doing so, some who try to understand the concept of memetics fall into the trap of trying to tie memes back to genetic advantage, as demonstrated in the previous section. The only similarity between genes and memes is that both are examples of a replicator that has survived the evolutionary algorithm. This is the only power they have - replicator power. In this sense, they are selfish. Genes are one example of a replicator and memes another. Blackmore (1999) does not think it is necessary that a replicator needs to come in a ready-labelled package.

Before Dawkins presented the idea of memes, American anthropologist F.T. Cloak (1975) suggested that culture is acquired in tiny, unrelated snippets that he called “corpuscles of culture” or “cultural instructions”. Cloak introduced his two groups “i-culture” and “m-culture”, which divided the instructions in people’s heads and the behaviour, technology

or social organization that those instructions produce. He said the main purpose of both i-culture and m-culture is the maintenance and circulation of the i-culture.

At first, Dawkins lumped together both the behaviours and the instructions that produce them, and called them all memes, while Cloak separates the two – a distinction that is somewhat analogous to the distinction between the genotype and the phenotype in biology. Later, Dawkins (1982) makes the same distinction as Cloak and defines a meme as “a unit of information residing in the brain”. Dennett (1991, 1995) sees memes as the ideas that are passed on; information that is undergoing the evolutionary algorithm.

What counts as a meme? Before answering this question, I want to ask a counter question. What is the unit of the gene? Genes are sequences of nucleotides along a molecule of DNA. There are different lengths of DNA, for example a codon, which is a sequence of three nucleotides or a cistron, which is a sufficiently long sequence of nucleotides to provide the instructions for building one protein – with a start symbol and a stop symbol. Neither are what we think of as the gene “for” something. A suggestion is that a gene is hereditary information that lasts long enough to be subject to the relevant selection pressures – not too short as it is passed on identically and renders it meaningless, but not too long either, as it does not survive long enough to be selected for or against. There has to be some moderate length (Dawkins 1976; Williams 1966). What could be the appropriate equivalent when it comes to memes? To illustrate with an example, a blob of paint is too small, while a gallery of paintings is too big, but a single painting seems like a natural unit.

Originally, Dawkins (1976) applied the term “meme” in a broad sense and referred to the behaviour, the physical structure in a brain, and memetic information stored in other ways. His original examples were tunes, ideas, catchphrases, clothes fashions, and ways of making pots or arches. Later he decided that “A meme should be regarded as a unit of information residing in a brain (Cloak’s i-culture)” (Dawkins 1982, p. 109). This implies that the information in the clothes or the arches does not count as a meme. But later still he says that memes “can propagate themselves from brain to brain, from brain to book, from book to brain, from brain to computer, from computer to computer” (Dawkins 1986, p. 158). Presumably, they still count as memes in all these forms of storage – not just when they are in a brain. Dennett (1995) defines the units of memes as “the smallest elements that replicate themselves with reliability and fecundity.” (p. 344) Durham (1991) treats memes as information, again regardless of how it is stored. Delius (1989),

on the other hand, describes memes as “constellations of activated and non-activated synapses within neural memory networks” (p. 45), or “arrays of modified synapses” (p. 54). Lynch (1991) thinks of them as memory abstractions while Grant (1990) defines memes as patterns of information infecting human minds.

Blackmore chooses to keep things simple. She uses the term “meme” to refer to memetic information in any of its forms “As long as that information can be copied by a process we may broadly call ‘imitation’, then it counts as a meme”.

### **3.1.4 Imitation**

Dawkins, Dennett and Blackmore (1999 p. 35) argue that we humans are different and that our ability to imitate is what sets us humans apart from other organisms. How does imitation differ from other kinds of learning? There are two major types of individual learning in psychology - classical conditioning and operant conditioning. Classical conditioning, with Pavlov and his salivating dogs, explains that two stimuli become associated by repeated pairing. According to Rescorla (1988), this kind of simple explanation is inadequate, as changes have occurred in Pavlovian conditioning since Pavlov's experiment in 1927. Modern Pavlovian conditioning “sees conditioning as the learning that results from exposure to relations among events in the environment”. One could say that some aspect of the relation between events in a certain environment has been copied into a brain, but it stops with that brain and cannot be passed on by imitation.

Operant conditioning is when behaviour is based on reinforcement or punishment and therefore either increases or decreases in frequency. This is similar to natural selection – some behaviours are positively selected, and others weeded out. Here, the instructions for carrying out behaviour are the replicators.

Social learning is learning by observing or interacting with another animal or person. Imitation is one form of social learning. Other forms of social learning do not support a replication system with true heredity, because the behaviour is not really copied, so the result looks like copying but it is not, because the behaviour must be created anew by the second learner.

These are examples of theories of learning, but as long as the behaviours cannot be passed on to someone else by imitation then they do not become memes and the selection is not memetic selection. What is true imitation then? Imitation is learning something about the

form of behaviour through observing others, while social learning is learning about the environment through observing others (Heyes 1993). Our skill of generalised imitation means that we can invent new behaviours of almost unlimited kinds and copy them on to each other. If we define memes as transmitted by imitation then whatever is passed on by this copying process is a meme.

What does imitation consist of? Imitation involves: (a) decisions about what to imitate, or what counts as “the same” or “similar”, (b) complex transformations from one point of view to another, and (c) the production of matching bodily actions, and is thus a complex process, something only us humans are capable of.

A meme gets copied by imitation. Blackmore (1999) gives altruism as a suggestion of a successful meme. How did altruism become so widespread?

## **3.2 How memes spread**

### **3.2.1 Altruism**

Altruism is behaviour that benefits another at the expense of the one doing it.

The theory of kin selection by William Hamilton (1964) illustrates how altruistic behaviour can spread in a population if animals are altruistic towards their own kin. The closeness of the relationship determines just how much it is worth paying for the possibility of aiding the spread of the gene. All the indirect ways a gene can benefit comes into play and the important quantity becomes “inclusive fitness” instead of individual fitness. Feelings make the animals act appropriately and the same goes for us humans.

Another theory that deals with altruism is the theory of reciprocal altruism by Robert Trivers (1971). A fundamental principle of reciprocal altruism is that people are most generous to people who are generous to them. It pays to be seen as cooperative person, because you may reap the reward later in the future. Gratitude, sympathy, trust and feelings of guilt are a few examples of things that are part of a mechanism that ensures our genes benefit, while at the same time executing altruistic behaviour.

Blackmore (1999) asks the question “Imagine a world full of brains, and far more memes than can possibly find homes. Which memes are more likely to find a safe home and get passed on again?” and suggests that among the successful memes are altruistic, cooperative, and generous ways of behaving.

She says that a well-liked person will spread more memes than a disliked person. The reason for this is that people are more likely to be influenced and persuaded by people they like (Cialdini 1994). So, friends will imitate this person's popular behaviour and thus their altruism will spread. And the more friends they have, the more people can potentially pick up their ways of making themselves popular. We could call this person a meme-fountain (Dennett 1998). On the other end, memes from a person who is disliked does not have many chances to replicate because the few people who could potentially imitate them rarely do so. Their ideas are unlikely to spread far because people do not listen to them, and if they do they do not adopt this person's ideas because they do not like them. Dennett (1998) calls this person a meme-sink.

In short, people who are altruistic, become popular, because they are popular they are copied, and because they are copied their memes spread further than the memes of less altruistic people, including the altruistic memes themselves.

Altruistic behaviour spreads copies of itself making us more altruistic. Additionally, altruism helps spreading other memes, providing a trick that memes can use to get themselves replicated.

### **3.2.2 Altruism trick**

The altruism trick depends on the simple idea that a meme that gets into an altruistic or likeable person is more likely to be copied than one that gets into a disliked person. What kinds of memes (other than memes for altruism) can get into the altruist?

Remember when you smile at someone or smile back at someone who smiles at you first? What about asking someone how they are or wishing everyone Happy New Year? These are all common memes with which we give the impression of caring about someone, even if we do not. These are memes that look like altruism, but are not. Other examples of altruistic memes that can make one look good are kindness to animals, recycling and the practice of refusing to eat meat. A meme that makes a person appear to be kinder and

more generous will increase the chances of that person being imitated and thus of that meme being spread.

We want to be consistent to our ideas, the way we view the world as well as reduce the dissonance between incompatible ideas, so we want to avoid “cognitive dissonance”, the unpleasant consequence of holding two incompatible views (Cialdini 1994; Festinger 1957). The need for consistency and the avoidance of dissonance provides the context in which memes can accumulate in different people. Once someone is committed to a particular set of memes, other memes are more or less likely to find a safe home in that person’s repertoire of arguments, beliefs, and behaviours.

### **3.2.3 Memeplexes**

One of Blackmore's examples of memes that can make one look good that I brought up in the previous section concerns vegetarianism, but I want to suggest that veganism can also be seen as a meme. Blackmore suggests that vegetarianism succeeds as a meme because we all want to be like the nice people who care about animals, and we copy them. We show that we are nice and caring people by becoming vegetarian or vegan, which will make people like us and copy us, which in turn allows our memes to spread. This is an example of how several memes can work together to get themselves replicated. This is a concept about how memes can replicate better as part of a group than they can on their own, called “coadapted meme complex” or just “memeplex” (Speel 1995). The phrases “Good children keep their clothes clean” and “Nice people say please and thank you”, are examples of simpler memeplexes, in which the instruction and the idea of being good is embedded (Blackmore 1999). By virtue of the memeplex containing the idea of caring for animals or the planet the memes “for” vegetarianism or veganism spread as well as those “for” altruism itself, thus all the memes in the memeplex benefit from being together.

### **3.2.4 The people, the message, the context**

Malcom Gladwell (2001) presents in his book “The Tipping Point: How Little Things Can Make a Big Difference” three factors that make something go viral. These factors

are a) people who transmit infectious agents b) the infectious agent itself and c) the environment.

The first factor is called “The Law of The Few”. The second factor includes the infectious agent itself and its “Stickiness Factor” while the third factor has to do with “The Power of Context”.

“The Law of The Few” involve three different types of people. In the late 1960s, psychologist Stanley Milgram (1967) conducted an experiment to find an answer to how human beings are connected. The experiment resulted in the concept of six degrees of separation – a small number of people are linked to everyone in a few steps and the rest of us are linked to the world through those special few.

During a TED Talk in 2010, the social scientist Nicholas Christakis, talked about this same phenomenon from a more modern point of view. He demonstrated how social networks can be used to predict an epidemic of any kind. Christakis argues that humans live in networks and that these networks have a particular structure. We have different kinds of relationships with various kinds of people, siblings, neighbours, friends etc. People in these networks have different numbers of connections, some have two, others ten, and their position in the network varies too. Some people are more in the centre of the network than others. Christakis mentions the friendship paradox that states that "the friends of randomly chosen people have higher degrees of connectedness, and are more central than the random people themselves". Nicholas Christakis highlights this friendship paradox as a method to predict epidemics inside networks without having to map the whole network, because all one need to do is to have a random sample of people, have them nominate their friends, these friends would be more central and thus one could get an early warning about an impending epidemic. During the TED Talk, Christakis talks about an outbreak of H1N1 flu at Harvard College in the fall and winter of 2009, and about the experiment that he did with his colleague James Fowler where they put this paradox into action. They took 1,300 randomly selected undergraduates, had them nominate their friends, and followed both the random students and their friends daily in time to see whether or not they had the flu epidemic.



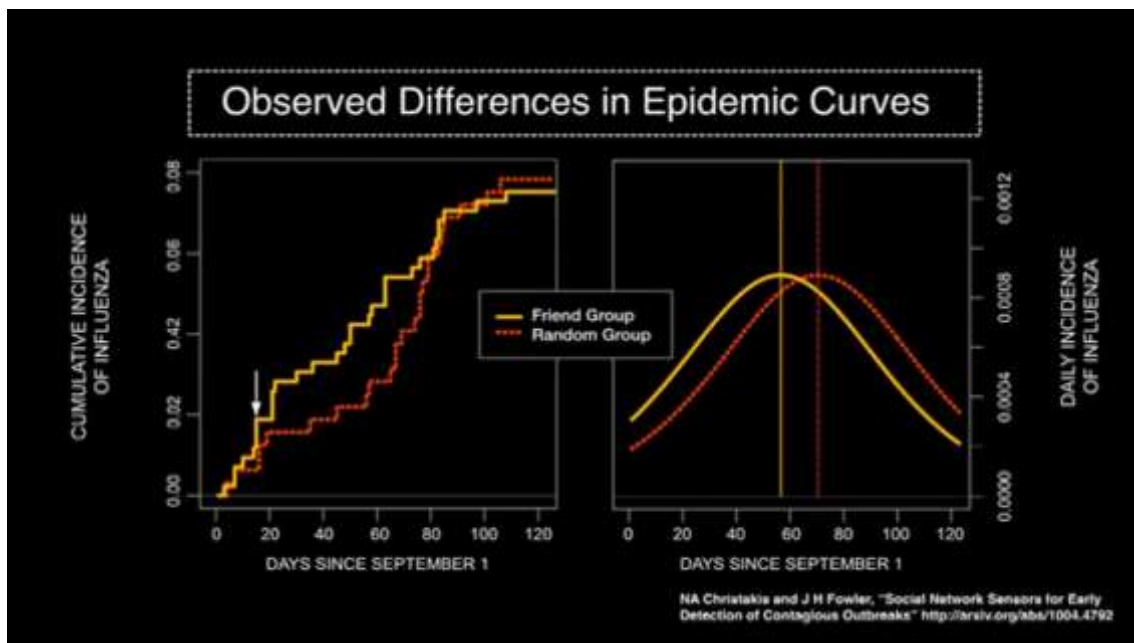


Figure 7. Diagrams that show the cumulative incidence of influenza and the daily incidence of influenza between the random students and their chosen friends. Source: Christakis (2010).

The result they got was that the difference in the two groups was 16 days (fig. 7). By monitoring the friends' group, they could get a 16 days advance warning of an impending epidemic in this human population.

These people who link us up with the world, who are “the friends of randomly chosen people”, are Connectors. Connectors are people with a lot of acquaintances and are able to be part of many varying worlds, because they have a personality that is a combination of curiosity, self-confidence and energy (Gladwell 2001). Connectors are the first group of people that play a big role in social epidemics.

The second group is called Mavens and they are information specialists. They are not just information hoarders, but they want to share their knowledge with others and be of help.

Salesmen is the third group, and they are the ones that will persuade you through small almost unnoticeable actions, such as smiling or nodding. Non-verbal cues are as crucial if not more crucial than verbal ones. Persuasion often works in subtle ways we do not appreciate.

In the 1960s, the researcher William Condon studied a four-and-a-half-second long video and discovered micro movements and that the people were engaging in “interactional synchrony”, the movements stop for one or two or three 1/45th-of-a-second, change direction and then continue. Furthermore, these movements were perfectly in time with each person's speech and the timing of stops and starts of micromovements, jumps and shifts in face and body, were in perfect harmony.

This is also true for conversational rhythm. Someone with a persuasive personality can draw others into their own rhythms and dictate the terms of the interaction.

There is something called motor mimicry, imitating each other's emotions as a way of expressing support and caring as well as communicating. Psychologists Klaine Hatfield and John Cacioppo and the historian Richard Rapson argue in their book *Emotional Contagion* (1994) that mimicry is one of the means by which we infect each other with our emotions. Emotion goes inside-out. Emotional contagion suggests that emotions can go outside-in.

Howard Friedman, a psychologist at the University of California at Riverside, developed what he calls the Affective Communication Test to measure someone's ability to send emotion, to be contagious. Friedman conducted an experiment and found that only the charismatic person could infect the other people in the room with his or her emotions, and not the other way round. (Friedman et al. 1980; Friedman & Riggio 1981)

In short, Mavens are like data banks and provide the message. Connectors are the social glue that spreads the message. Salesmen are the ones who persuade you.

The second ingredient of Malcom Gladwell's recipe for making something go viral, the “Stickiness Factor”, is about how memorable the content of the message is in itself. Much of what we are told or read or watch, we just do not remember. The threshold over which an epidemic need to get over for it to tip is sometimes a lot narrower than it seems.

The environment also plays a crucial role in starting a social epidemic. “Epidemics are sensitive to the conditions and circumstances of the times and places in which they occur.”

Criminologists James Q. Wilson and George Kelling developed the Broken Windows theory, which claims that government institutions can better combat major crimes by first eliminating minor offenses in society. The argument is that individuals with the potential

of being violent are likely to be deterred from acting violently in an environment that has a reputation for punishing small crimes. This is because they are made to understand that any criminal acts cannot be tolerated. The theory describes how some things can act as signs that sends out the message of “no one cares and no one is in charge” and that “anything goes”. The Tipping Point does not need to be a person, but can be an attribute of the environment instead. (Kelling & Coles 1996)

The Power of Context suggests that behaviour is a function of social context, that the environment holds a crucial position in influencing the behaviours of individuals and that the minor contextual elements of an environment have extensive impacts on behaviour and attitudes as compared to the broad tangible aspects of the same environment. (Gladwell 2001)

## 4 LITERATURE RESEARCH

### 4.1 Contributing memes

#### 4.1.1 “Karppaaminen”

The Finnish term "Karppaus" stems from the English word low carbohydrate or "low-carb" and refers to a diet where one restricts caloric intake by reducing the consumption of carbohydrates (Last & Wilson 2006 p. 1942; Karppaaminen.fi 2019; Mayo Clinic Staff 2020).

Between the year 2000 and 2006, there were not many mentions of “Karppaus” (fig. 8), especially in more official places, and the term only started appearing in magazines or newspapers such as *Anna* (Suominen 2007) and *Kaleva* (Kuukasjärvi 2008) in 2007 and 2008 respectively (fig. 9 and 10). In 2009, Johanna Joutsen and Heikki Laatikainen from JAMK University of Applied Science wrote a Bachelor’s thesis about low carbohydrate diets and their long term effects on adult obesity and health. There was an article originally published in 2010 on the Finnish Broadcast Company's website about this low carbohydrate diet trend (Lappalainen 2016).

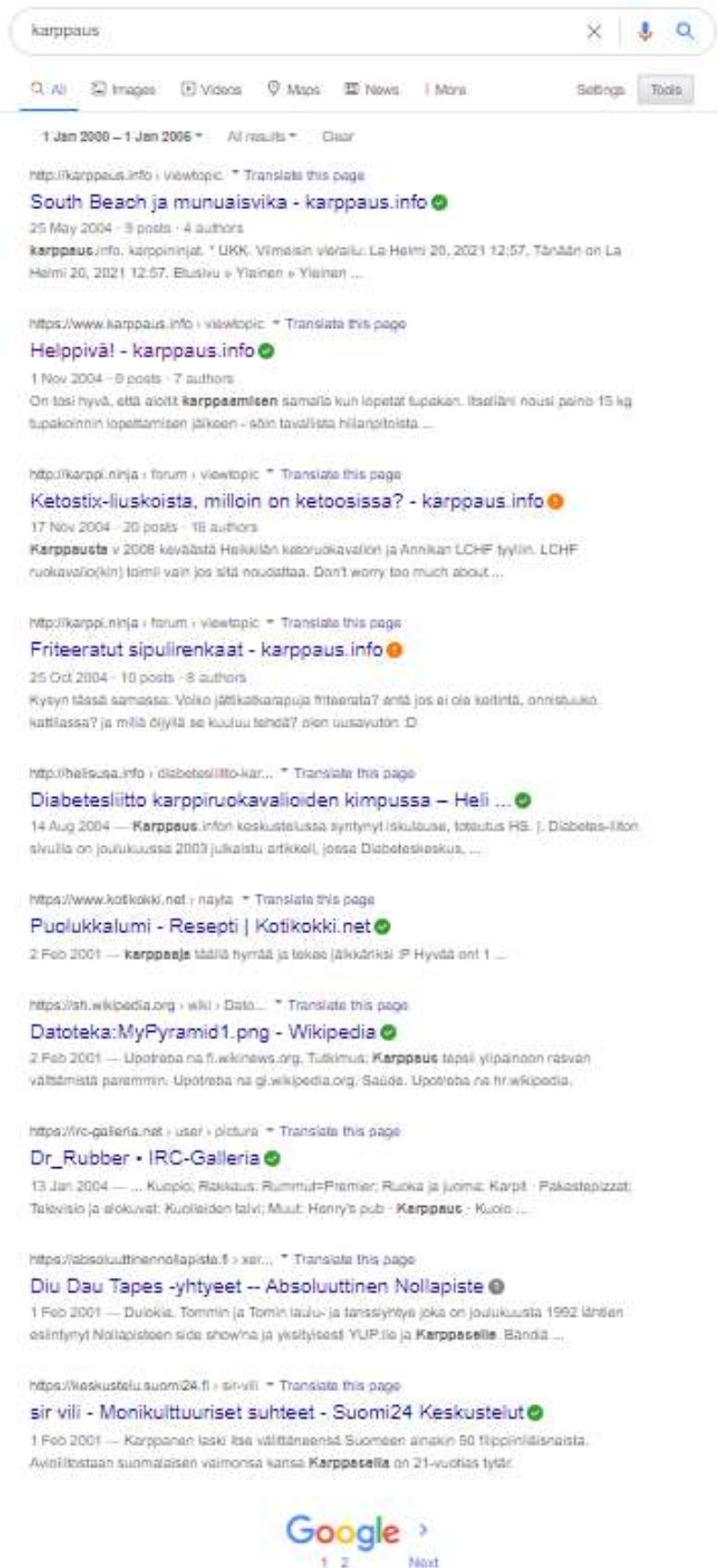


Figure 8. Google search results for the word “Karppaus” between January 1<sup>st</sup>, 2000 and January 1<sup>st</sup>, 2006.

Google

karppaus

All Images Videos Maps News More Settings Tools

1 Jan 2000 – 1 Jan 2008 All results Clear

<https://anna.fi> - ... - Lähtötila - Translate this page  
**Karppaus on elämäntapa | Anna.fi**  
 27 Apr 2007 — sivulla kerrotaan uusille kävijöille. Karppauksessa on eri astetta. Tiukka katokarppi syö noin 20 grammaa hiilihydraatteja päivässä, aiskarppi vastaavasti 50 ...

<https://karppaus.info> - resepti - Translate this page  
**Karppilan reseptit - karppaus.info**  
 24 Oct 2005 — Kaikki Karppilan 2579 reseptiä löytyvät uudenaikaiselta reseptisivulta. Vainat linkit toimivat, joten muualla jaetut reseptit napsahtavat oikeaan osoitteeseen.

<https://www.karppaus.info> - arkisto - Translate this page  
**kotisivu :: karppaus.info**  
 12 Dec 2005 — Tiukka katokarppi (Aikuisin indukoitu tms. aloitusvaihe). (n. 20g hiilihydraattia/päivä). Aiskarppi: (n. 60g hiilihydraattia/päivä). Hyväkarppi: (n. ...)

<https://www.makupalat.fi> - linkki - k... - Translate this page  
**karppaus.info - reseptit | Makupalat**  
 25 Feb 2007 — karppaus.info - reseptit. Vähähiilihydraattista ruokavaliota noudattavien eli karppaajien omia reseptejä on kertynyt yli 250. Ohjeet ovat aakkosissa ja lajeittain.

<https://www.vouva.fi> - ketju - karpp... - Translate this page  
**Keskustelu - Karppaajia paikalla?Miten imettävä voi aloittaa ...**  
 18 Jul 2006 — Täällä karppaus sujui aikaista mallikkaasti. Syödiä saa paljon, kun liikkuu ja ... Ja ne toimit, aiskarppaaja ja karppaaja- mitä eroa heillä on? olen joskus yrittänyt ...

<https://fi-fi.facebook.com> - groups - Translate this page  
**Karppaus.info | Facebook**  
 17 Oct 2007 — Kohtaella Karppaus.info on 14 732 jäsentä. Karppifoorumin hiljattaiset naamenkirjoitajat. HUOM: Hyväksymme ryhmään vain sinne itse hakevat henkilöt ja ...

<https://keskustelu.pakkotoisto.com> - ... - Translate this page  
**Karppaus-ruokavallio reenaamiseen? | Pakkotoisto.com**  
 24 Oct 2005 — En tiedä onko tästä jo threadia mutta en ainakaan löytänyt. Eli siis pääsääntöhan tuossa ruokavaliassa on, että hiilihydraatteja syödään todella vähän ...

<http://karppi.ninja> - forum - viewtopic - Translate this page  
**Hernekeitto - karppaus.info**  
 20 Feb 2007 - 11 posts - 4 authors  
 Päätin taas aloittaa karppauksen, nyt todellakin saadeti itseni myös pidettyä siinä. Olen aikaisemmin karppailut Montignacin ohjeistuksella ja se tuntui silloin ...

<http://karppi.ninja> - forum - viewtopic - Translate this page  
**Sallituin hedelmä ??? - karppaus.info**  
 9 Aug 2006 - 20 posts - 11 authors  
 Finelätään tänäänkin löytyy helposti vastaus. Eli hedelmien imeytyvät hiilihydraatti / 100g: 1 Avokado tavallinen punnittu kuoriineen ja kiilneen 0.5 2 Ajokade ...

<https://www.astro.fi> - forum - Translate this page  
**Toiselta paistalta: 25 syytä miksi VHH:si ei toimi - Astro.fi**  
 5 Mar 2006 — Tuotekin kotijua seurasin kun yritin pudottaa painoa karppaamalla. Olen sittemmin päättynyt siihen, että karppaus - kuten moni muukin elämäntapa ja dieetti - ...

Googooogle  
 1 2 3 4 5 E Next

Figure 9. Google search results for the word “Karppaus” between January 1<sup>st</sup>, 2000 and January 1<sup>st</sup>, 2008.

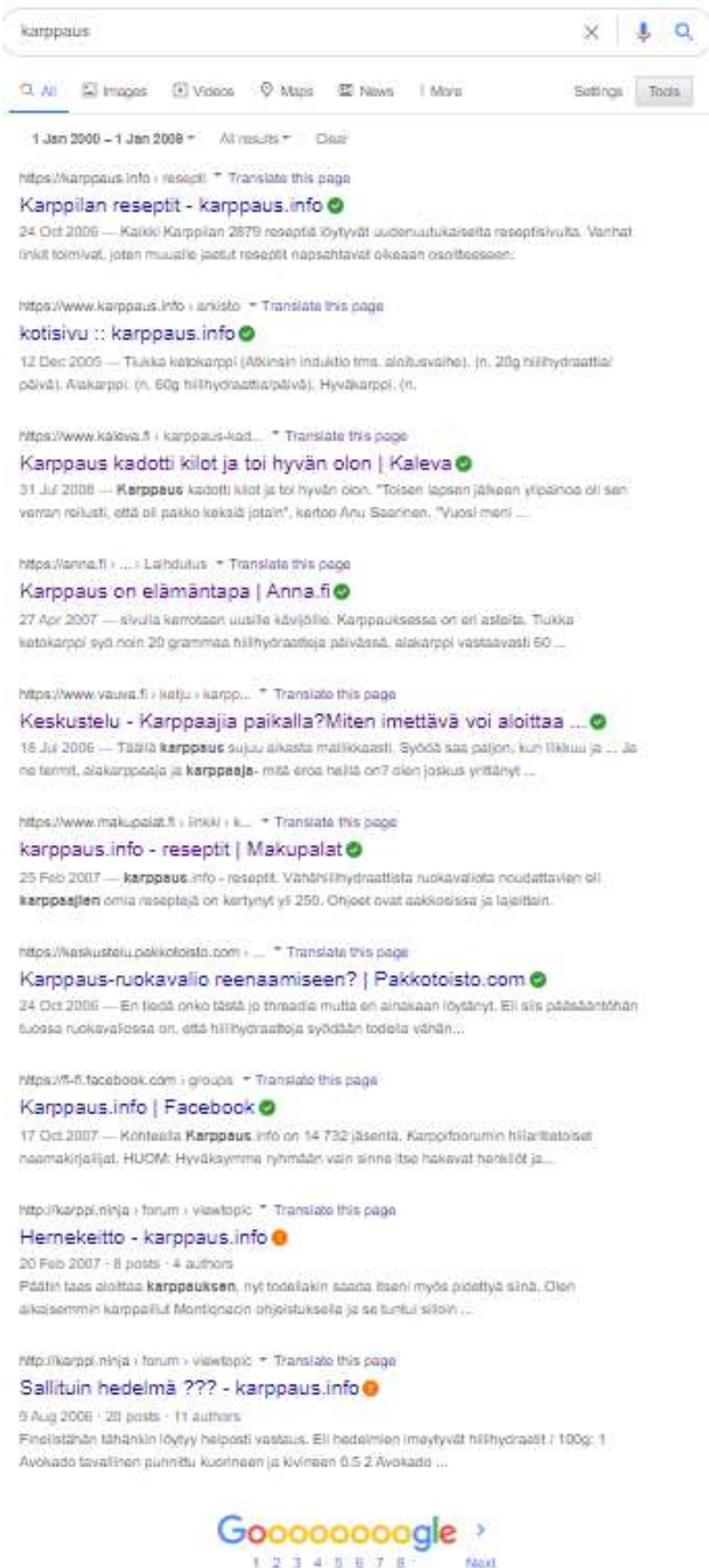


Figure 10. Google search results for the word "Karppaus" between January 1<sup>st</sup>, 2000 and January 1<sup>st</sup>, 2009.

From 2011 onwards, and especially during the fall of 2011, the diet trend called "Karp-paus" became more visible in Finnish media than it had been the previous years (Eskola 2011; Jämsen 2012; Kotiliesi toimitus 2011; Lappalainen 2016; Leinonen 2011; Ranta 2011; Terve.fi 2011).

#### **4.1.2 Flexitarian diet**

The term flexitarian was coined in the 90s (Maxwell 2004). What does flexitarian or a flexitarian diet mean? Cambridge Dictionary (Cambridge University Press 2021) defines a flexitarian as a person who "eats mainly vegetarian food but eats meat occasionally" while the Merriam-Webster Dictionary (Merriam-Webster, Incorporated 2021) defines it as "one whose normally meatless diet occasionally includes meat or fish". Someone who is flexitarian and is practicing this kind of diet ('fleksaaminen' in Finnish) tries to incorporate more vegetables and vegetarian meals into their life (Bergström 2019). Annikka Marniemi, a food expert at the Consumers' Union of Finland, told Iltalehti in May 2012 that she believes that the next food trend is going to be a flexitarian diet (Salonen 2012). During the same month, Iltä-Sanomat published an article where they state that a flexitarian diet is the new summer trend (Holopainen 2012).

## **4.2 Contributing events**

In 2002, Finland ratified the Kyoto Protocol, which is the first legally binding agreement on an international scale to reduce emissions. The protocol became effective in 2005. (Ministry of the Environment 2021) During the same year, the United Nations General Assembly welcomed "the decision of the General Conference of the United Nations Educational, Scientific and Cultural Organization to support the declaration of 2008 as the International Year of Planet Earth with a view to highlighting the importance of Earth sciences" and decided to declare 2008 to be the International Year of Planet Earth. (United Nations General Assembly 2006)

In 2009, the members of the United Nations Framework Convention on Climate Change (UNFCCC) agreed to the Copenhagen Accord during the 2009 United Nations Climate Change Conference, also called Copenhagen Climate Change Conference (United Nations Framework Convention on Climate Change 2010; United Nations Framework



Convention on Climate Change 2018; United Nations Framework Convention on Climate Change 2021a; United Nations Framework Convention on Climate Change 2021b).

The 2010 United Nations Climate Change Conference produced the basis for the most comprehensive and far-reaching international response to climate change the world had ever seen to reduce carbon emissions. (United Nations Framework Convention on Climate Change 2021c) In 2010, Graham Hill, the founder of TreeHugger.com, an information site that offers advice, clarity, and inspiration about sustainability (Treehugger.com 2021), invented the concept Weekday Vegetarian, which means people who are Weekday Vegetarians “eat nothing with a face” from Monday through Friday but “On Saturday and Sunday, it’s our choice.” (TED Conferences LLC 2010; Hill 2011).

In 2011, low-carb diet or "Karppaus" in Finnish, became a big trend in Finland. (Eskola 2011; Jämsen 2012; Kotiliesi toimitus 2011; Lappalainen 2016; Leinonen 2011; Ranta 2011; Terve.fi 2011) The UN estimated that the world's seven billionth person will be born on October 31<sup>st</sup>, 2011. (BBC 2011) Flexitarianism becomes a trend in Finland in 2011 (Rantanen 2016).

The term flexitarian got added into the mainstream Merriam-Webster’s Collegiate Dictionary in 2012 (Italie 2012). John Schoolcraft becomes Creative Director at Oatly during this year as well (eatbigfish 2016).

The global Minamata convention on mercury was signed in October 2013. The European Union and most of its member states, including Finland, joined this treaty. (United Nations Treaty Collection 2021) The first “Lihaton lokakuu” or Meatless October in English, was organised in 2013 when Leo Stranius, the chief executive officer of the Nature League – Luonto-Liitto in Finnish – a nation-wide non-governmental nature and environmental protection organization for children and the youth (Luonto-Liitto 2021), challenged the Finnish journalist and one of the duo-presenters in the famous traveling series Madventures Riku Rantala to a Meatless October (Lamminen 2013).

The first Veganuary pledge campaign was organised in January 2014 (Evans 2020). Veganuary is a non-profit organisation that encourages people worldwide to try to go vegan during January and beyond (Veganuary 2021).

In September 2014, Oatly got sued by the Swedish conglomerate LRF Mjölkk for using phrases such as “Milk, but for humans” and “No milk. No soy. No badness.” in their marketing, as LRF Mjölkk saw it as misleading the consumers and for making milk seem bad. The ‘milk war’ ended with Oatly getting sued and forbidden to use the previously

mentioned phrases as well as statements such as "full of goodness" and "liquid goodness" as well as any similar wordings that could give the impression of milk being bad or unsuitable for humans. This lawsuit and the resulting publicity in addition to the fact that Oatly made the lawsuit public by putting it up on their website, helped boost Oatly's sales by 45% in Sweden. (Klaar 2014; Löf 2015; Kvist 2015; Djerf 2016; Lewis 2018) An article in 2016 announced that a new food fair event, the first vegan food fair in Finland called "Vegemessut", will be organised at the end of January 2017 (EatAndTheCity Oy 2016).

## **5 EMPIRICAL RESEARCH**

My method to gather qualitative material was through interviews with producers, retailers, and consumers. I wanted to get some insight into how these groups experienced this rising vegan trend. I got answers from one producer, one retailer and four consumers. From these four consumers, three of them are vegan and one of them identifies themselves as flexitarian. Furthermore, I gathered information from two articles were a representative for Atria (Atria PLC 2018) and The Central Finnish Cooperative Society (Suomen Osuuskauppojen Keskuskunta, SOK) (Kaukinen 2018) have been interviewed. The interview questions were asked in both English and Finnish. The answers were provided in either English, Finnish or Swedish and have been translated to English.

### **5.1 Producers**

#### **5.1.1 Hoviruoka**

I got an interview with the chief executive officer at Hoviruoka Oy, Pekka Kaikkonen (PK).

**When did you start producing vegan products?**

**PK:** Well, we started producing vegan products in 2015. Previously, we had produced vegetarian products, but they were not vegan.

**What made you start producing vegan products?**

**PK:** There were many factors that made us begin, for example the fact that we previously had produced those vegetarian ones, but they had not taken off. The market was not particularly interested in them at that time. One significant piece was that I have two daughters that at that time studied in university and we had a test group there and we tested several of our products with them. We got feedback from them that there should be vegan options as well. We had studied the market and found out that there should be vegetarian products, but vegan products were something unheard of. We attended the Helsinki trade fair in Messukeskus in 2014 and had vegetarian meals and products on display, but we got so many questions during those three days asking if there were any vegan products that I understood that okay, there really are not any products of this kind in ready-to-eat meals. Right after that we started developing a new product and in autumn 2015 we launched the vegan pastry Vihis. We even decided to stop everything else at that time and concentrated on developing and producing only vegan products. This was all coming from the consumers' side, the data came from several different channels.

**Did the demand live up to the expectations you had?**

**PK:** In the beginning it did surprise us. We understood that there has to be vegetarian products and that people want that. Our first vegan products were huge successes nationwide and not only from our point of view. Vihis and mustapapupihvi broke through our expectations on a national level, as did their successors. They definitely went far and beyond what we had expected.

**Where did you get the idea to make "Vihis"?**

**PK:** We are a big manufacturer of meat pastries and we tried to bring in more vegetarianism into our repertoire. In 2015 when we started developing Vihis, we had the opportunity to make a vegetarian cheese, but the pressure to do something vegan was so strong at that time and I had decided to produce a vegan product. We had the skills to develop those kinds of products, we had the resources. Vihis became vegan mainly from customers wishes.

I have been in this industry for thirty years but Vihis was definitely the biggest increase in popularity of a product that I have ever witnessed...how quickly it started rising in popularity.

### **When and how did the vegan trend begin in Finland in your opinion?**

**PK:** It probably started way earlier, but you could say that Vihis was the thing that made the market open their eyes to the fact that people also do buy ready-to-eat meals that are vegan. My guess is that vegans had up until then mostly done all their meals and food themselves and that there was a scarce supply of vegan products in the convenience stores. The act of eating vegetarian food and not only vegan food has increased considerably since before. I think veganism has grown during the last decade...I remember when my daughters were around their twenties and I wondered why they were choosing vegetarian food in the restaurant when one for once could get a nice steak. This increase in popularity appeared earlier in the university world. Tampere is one of our biggest sales areas...there's social science studies...there were some differences, one of my daughters studied in Joensuu and there this trend was stronger while my other daughter studied in Lappeenranta in a University of Applied Sciences and this trend did appear there as well, just not as strongly...so I do feel that during the last decades veganism has been promoted quite a lot in the university world.

#### **5.1.2 Atria**

Pasi Luostarinen, the manager for the Vegyu-project and the director of marketing and marketing research at the Atria corporation commented on the phenomenon of an increase in vegetable-oriented diets. A great many consumers eat more vegetables and eat meat less often than before. In Finland, there are about 1.6 million of these “flexitarians”, as they are sometimes called (Kaukinen 2018).

“This trend was clear at the beginning of 2017. One could see on an international level how food companies in their strategies gradually started to wade into the vegetarian market and they had many meatless products under development”, says Pasi Luostarinen.

Vegyu was created as an answer to consumer wishes. The team that developed this new product line felt that it was incredibly rewarding to be able to see a consumer wish become reality. (Atria PLC 2018)

## **5.2 Retailers**

### **5.2.1 S-group**

I interviewed Juha Nieminen (JN), sales manager for meat/meat products/dairy products/egg/frozen food for the S-group through email.

#### **When did you start selling vegan products and what made you start selling vegan products?**

**JN:** There was never a conscious decision to sell vegan products. They have been sold for decades, as they have been naturally vegan from the beginning, but have just not been marketed as such. One good example of this kind of product is X-tra Kevyt mayonnaise, which I believe is one of the first vegan mayonnaise we have sold. In conclusion, we have sold vegan products from the beginning among the other products. The significance of the vegan products grew in 2015 and 2016. The birth of the vegan trend might be explained by how the launch of Hoviruoka's vegan pastry Vihis in autumn 2015 surprised everyone. It made it clear that there was a greater demand for vegan products than anyone had recognised.

#### **Did you predict there to be a rise in demand of vegan products or was it an answer to consumer demand?**

**JN:** We recognised that there was a demand for vegan products. They sold fairly little, but they were talked about. We wanted to make sure we could offer all the best and new releases. We actively worked to make sure we get the best vegan products to Finland, both from Europe and United States of America.

#### **Did the demand live up to the expectations you had?**

**JN:** The sales have grown as expected. It still continues to grow, but the speed at which it grows has become steady. The consumption of vegan products is going mainstream as more families eat more often plant based products. The growth stems from the carnivores and vegetarianism or the partly replacement of meat is more popular than veganism.

### **When and how did the vegan trend begin in Finland in your opinion?**

**JN:** As I said before, the veganism trend became apparent in Finland mainly in 2015 and 2016, after which the trend has become more and more mainstream.

### **5.2.2 The Central Finnish Cooperative Society (Suomen Osuuskauppojen Keskuskunta, SOK)**

I gathered information from an interview that Iltalehti conducted with Antti Oksa, responsible for assortments and pricing for fresh foods at The Central Finnish Cooperative Society (Suomen Osuuskauppojen Keskuskunta, SOK) in 2019.

The article states that the supply in the stores depend on the trends and the consumers' wishes. Oksa says that they have people that are head of assortments for certain product groups and that these people are experts within their own product group. They know their own customers' needs. These executives also check buying data, what gets bought more of and what gets less. SOK also uses market research, both research that they execute themselves and studies that they buy from a third party. They try to understand rising trends and observe what happens around the world, as all phenomena come to Finland from the rest of the world.

Antti Oksa says that new products rarely become a hit product and that the majority of the new products disappear after one or two years on the market. According to Oksa, a product can become a hit if it becomes popular on social media. One example he gives is Hoviruoka's Vihis. They had stocked a normal amount of the product but got surprised by the phenomenon that it became. There was a shortage of the product in the beginning in many stores and there was a hunt for the product on social media. This made SOK stock the product extensively in several stores.

Future products get planned ahead of time, for example the Christmas assortment in spring already. Antti Oksa says that the average planning period is over six months, but it depends on the product group. (Niiniahho 2019)

## 5.3 Consumers

I interviewed four consumers of which one identifies themselves as a flexitarian and the other three as vegan.

### Interviewee S

S is vegan.

#### **When did you become vegan?**

S: About seven years ago.

#### **From where did you get the idea to become vegan? Advertisement? Friend(s)?**

S: I had acquaintances that were vegan so it felt natural to become closer to veganism and I also wanted to test it out.

#### **Have you noticed an increase in vegan options in the grocery store? If so, when did you notice?**

S: I think the biggest difference happened during the two first years I began my vegan diet. Since then, the increase of vegan products have been quite stable.

#### **Have you ever asked a grocery store to get more vegan products?**

S: Have actually never done it, but I prefer to visit stores that already have a broader supply of vegan products from the get go.

### Interviewee O

O is vegan.

#### **When did you become vegan?**

O: I became vegan on my 22nd birthday in 2013.

#### **From where did you get the idea to become vegan? Advertisement? Friend(s)?**

O: I have been worried about the climate change since I was little so adding that to my vegetarian background (which was because of animal rights), I felt it was one way to ease my mind and help saving the planet.

#### **Have you noticed an increase in vegan options in the grocery store? If so, when did you notice?**

O: I have indeed noticed an increase in vegan options! When I started my vegan journey there was some good products that made daily life easy. But from that point 8 years ago the rise of products on every category has been exponential to this day.

**Have you ever asked a grocery store to get more vegan products?**

**O:** I have sent once a feedback asking for one vegan product particular (the Beyond meet patty) but the selection has always been basically so wide that I have been able to find everything I need. (I cook a lot myself though.)

**Interviewee T**

T is vegan.

**When did you become vegan?**

**T:** I became a vegan in fall 2016 when I moved to my own apartment. I was nineteen years old at that time. I had made vegan food for myself before this and since I was thirteen years old I had been 80 percent vegetarian (I ate fish though). I only ate meat at home, but not in school or really anywhere else outside the school either.

**From where did you get the idea to become vegan? Advertisement? Friend(s)?**

**T:** The main reason has to do with the environment, as a vegan diet is one of the most effective ways to decrease one's own amount of environmental pollution. Animal rights also played a part, but mainly the climate change and other environmental crises.

**Have you noticed an increase in vegan options in the grocery store? If so, when did you notice?**

**T:** It has increased. Had already increased in 2016, but maybe with the Nyhtökaura and fava bean products even more clearly.

**Have you ever asked a grocery store to get more vegan products?**

**T:** Actually no, because there has always been a good supply of products in the stores close to me. When I have travelled, I have not bothered with the requesting, as I most likely will not visit the same store again. It would be good to have the energy to bother and ask during travels as well, because only then can the supply become better.

**Interviewee A**

A is a flexitarian who prefers vegetarian alternatives and has practiced a vegetarian/vegan diet before for years.

**When did you become vegan?**

**A:** First time I took interest in veganism was in upper secondary school when I quit drinking pure milk for health reasons.

**From where did you get the idea to become vegan? Advertisement? Friend(s)?**



**A:** I had watched a lot of YouTube videos of how your diet impacts the environment and that might be where the idea came from.

**Have you noticed an increase in vegan options in the grocery store? If so, when did you notice?**

**A:** In 2016 when I myself started to go vegan there wasn't that many "vegan" labeled products. Vegetarian options (things containing eggs and milk) were widely available but now I feel like vegan options have become the norm. So the shift has happened during these four years in my mind at least. Of course the fact that I became more focused on the vegan options during 2016 impacts my perspective on this.

**Have you ever asked a grocery store to get more vegan products?**

**A:** No I don't think so.

**One follow-up question. Do you still have a more vegetarian-based diet?**

**A:** Yes! Even though I have started to eat meat again, I prefer plant based milk replacements and vegan options in restaurants etc. Probably because I used to eat them all the time it comes naturally.

## **6 DISCUSSION & CONCLUSION**

In this chapter I will try to provide answers to my previously asked questions: How does an idea catch on? What makes a specific idea catch on and not others? Was the popularity driven by distributors or consumers? Is it a meme that is driving both distributors and consumers?

How does an idea catch on? An idea catches on through imitation. One of Dawkins original examples of memes include ideas. There is not one single overarching definition of what a meme is, but one definition is that a meme is a replicator and something that can endure the evolutionary algorithm based on variation, selection and retention. Another definition, by Blackmore, is that a meme is information that can be copied by a process we may broadly call 'imitation'. Imitation is learning something about the form of behaviour through observing others. It also involves (a) decisions about what to imitate, or what counts as "the same" or "similar", (b) complex transformations from one point of view to another, and (c) the production of matching bodily actions, and is thus a complex process, something only us humans are capable of.

What makes a specific idea catch on and not others? Memes are competing for our attention and a meme that catches on is a meme that have won in the competition between other memes. The ones who win get copied and spread. The “purpose” of a meme is to get copied. The meme does not have a will of its own and does not “want” anything, it only means that the meme has the right qualities to win in the competition of the memes through natural selection and thus gets copied and replicated.

Certain people can influence other people. Mavens are like data banks and provide the message. Connectors are the social glue that spreads the message. Salesmen are the ones who persuade you. As an example, Oatly might have worked as a combination of a Maven and a Salesman. They made the message simple and clear: choose Oatly and save the planet and yourselves. The message is short and powerful, hence sticky and memorable. Furthermore, Oatly references studies (Oatly 2021), for example one by Poore and Nemecek (American Association for the Advancement of Science 2018; American Association for the Advancement of Science 2019) about climate change and present figures of how Oatly help in this matter (Oatly 2019). This together with their way of talking and tone of voice makes them persuasive, like a Salesman.

Was the popularity driven by distributors or consumers? Rather than it being the distributors or consumers that have made the trend explode, the question has shifted from being only about animals to include animal welfare, saving the Earth and one’s own health. The terms being used in the debate have also changed.

In a 2010 TED Talk, Graham Hill says how he “realized that what I was being pitched was a binary solution” before presenting the concept of “weekday veg”. The idea that it is black and white, that “either you're a meat eater or you're a vegetarian”. The “weekday veg” concept introduces a way of reducing peoples’ meat consumption, but reminds everyone in the same breath that “it's okay to break it here and there. After all, cutting five days a week is cutting 70 percent of your meat intake.” (TED Conferences LLC 2010)

Brian Kateman, in a TED Talk in 2014, mentions different words we use to describe people who eat less meat, such as semi-vegetarian and mostly-vegetarian. Furthermore, he touches upon the various connotations different words, for example vegan and flexitarian, have or what perceptions they invoke in other people. He says that these differences in perception “matter a great deal. They determine how seriously we are taken, how

our messages are understood, and our feelings of belonging”. Kateman gives an example of a 2014 study from Yale University that found that the term ‘global warming’ “generates more intense worries and negative reactions” than the term ‘climate change’. Brian Kateman explains that this same problem occurs with words like flexitarian and semi-vegetarian. They express a step towards a more sustainable planet, but they mostly call forth “negative associations, feelings of division and moral incompatibility”. Kateman realised there was a need for a term for people who commit to reduce their consumption of meat, “who take action to reduce their meat consumption, no matter the degree or motivation” (Kateman 2017). (TEDx Talks 2014) Kateman and one of his friends came up with the term ‘reducetarian’. Reducetarianism is “the practice of eating less meat – red meat, poultry, and seafood – as well as less dairy and fewer eggs, regardless of the degree or motivation”. Reducetarianism can be seen as an umbrella term for all kinds of diets that try to reduce meat consumption, such as the flexitarian diet that I mention in section 4.1.2 and earlier in this section. Vegetarianism and veganism also belong under this title. Reducetarianism recognises that it is not about an either-or situation, but that people are willing to give up meat in various degrees and explains that this is okay. Kateman reminds people that “It starts with us, all of us, to encourage ourselves and others, to simply eat less meat” and that “You can change the world by ordering a smaller steak, or doing something more”. (TEDx Talks 2014; Kateman 2017; Sachs 2019; Reducetarian Foundation 2020)

As a reference to earlier in this chapter about potential Mavens and Salesmen, the same could apply to Graham Hill and Brian Kateman. They could be seen as part Mavens and part Salesmen.

In the Literature Research chapter, I have highlighted events that happened between 2002 and 2015 that might have added to the practice of eating less meat. There are events that happened particularly between 2010 and 2015 that could have contributed to “The Tipping Point” for veganism. One major contributing event might have been the lawsuit between Oatly and the Swedish conglomerate LRF Mjölke in 2014 that started a debate about milk consumption and sustainability overall, especially after Oatly released the lawsuit documents to the public. This incident could be seen as a tipping point for the overall act of reducing meat consumption, both worldwide and in Finland. Especially for the case in Finland, the increase in attention that the ‘Vihis Kasvispiirakka’ by Hoviruoka Oy got in

2015 when they launched it in Finland might suggest this. Furthermore, although the empirical research is limited in quantity, it might also hint at a change around 2014 and 2015.

Is it a meme that is driving both distributors and consumers? We might see that the behaviour to consume less meat or become vegan is a meme, or rather a memplex. It uses the altruism trick to get itself copied. Good humans think about the animals or the environment or both and most people want to be seen as good. It makes you likable and therefore people will listen to you. If people listen to you, you can spread more memes than a not well-liked person can. It is not “you” per say, who spread the memes. It is the memes themselves propagating and we humans are just vehicles that carry them. The memes are “working” together to replicate themselves.

Now I want to suggest that the terms, flexitarian or ‘fleksaaminen’ and reducetarian, in combination with the Oatly lawsuit, might have contributed to the increased phenomenon of people consuming less meat and becoming more aware of the food industry’s hand in global warming. Additionally, the phenomenon might rather be about the decreased consumption of meat than people going vegan, thus the phenomenon possibly being about reducetarianism not veganism. I also propose that this phenomenon is a ‘memplex’ based on arguments presented throughout this thesis, that the words used in the debate and the idea of being good all count as memes and form a ‘memplex’ ‘working’ together all in the process of trying to replicate themselves through us humans, their ‘vehicles’.

## **7 FUTURE RESEARCH**

This thesis is limited due to several aspects. One aspect is the amount of qualitative data gathered. The empirical sample used is small and cannot be used for generalisation, merely suggestions, thus longer interviews with more relevant actors might provide more precise information about when exactly the trend reached Finland and from what direction. Another aspect is the methodology, memetics, which could be sharpened to get a more solid end result. Furthermore, larger quantitative data sets could contribute to narrowing down the tipping point even more. As noticed in the previous chapter, the fact that the phenomenon might be about reducetarianism and not veganism is an interesting finding and could be explored in future research of this topic.

## REFERENCES

- American Association for the Advancement of Science**, 2018, *Reducing food's environmental impacts through producers and consumers*, Available at: <https://science.sciencemag.org/content/360/6392/987.long> Accessed: 22.4.2021
- American Association for the Advancement of Science**, 2019, *Reducing food's environmental impacts through producers and consumers*, Available at: <https://science.sciencemag.org/content/363/6429/eaaw9908> Accessed: 22.4.2021
- Atria PLC**, 2018, Vegyu – from consumer wishes to plates, Available at: <https://www.atria.fi/en/group/careers/stories/vegyu--from-consumer-wishes-to-plates/> Accessed: 11.4.2021
- Atria Suomi Oy**, 2018a, *Vegyu: kasvissyöjille, lihansyöjille ja kaikille siltä väliltä*, Available at: <https://www.atria.fi/konserni/ajankohtaista/tiedotteet/2018/vegyu-uutuudet-2018/> Accessed: 7.5.2020
- Atria Suomi Oy**, 2018b, Available at: <https://www.atria.fi/konserni/tyonantajana/stories/vegyu-kuluttajan-toiveistalautasille/> Accessed: 8.2.2021
- Atria Suomi Oy**, 2020, *Atria Suomi*, Available at: <https://www.atria.fi/konserni/yritys/kansainvalisyys/atria-suomi/> Accessed: 7.5.2020
- BBC**, 2011, *Population seven billion: UN sets out challenges*, Available at: <https://www.bbc.com/news/world-15459643> Accessed: 25.3.2021
- Beanit**, 2020, *Härkis® Original*, Available at: <https://www.beanit.fi/fi/tuotteet/harkis-original/> Accessed: 6.5.2020
- Bergström, J.**, 2019, *Fleksaus eli joustava kasvissyönti*, Available at: <https://www.valio.fi/ruokavaliot/fleksaus-eli-joustava-kasvissyonti/> Accessed: 12.3.2021
- Blackmore, S.**, 1999, *The Meme Machine*, Oxford University Press
- Cambridge Dictionary**, 2020a, *Meaning of vegan in English*, Available: <https://dictionary.cambridge.org/dictionary/english/vegan> Accessed: 29.3.2020
- Cambridge Dictionary**, 2020b, *Meaning of veganism in English*, Available at: <https://dictionary.cambridge.org/dictionary/english/veganism> Accessed: 29.3.2020
- Cambridge University Press**, 2021, *flexitarian*, Available at: <https://dictionary.cambridge.org/dictionary/english/flexitarian> Accessed: 11.4.2021

- Campbell, D. T.**, 1960, Blind variation and selective retention in creative thought as in other knowledge processes. *Psychological Review*, vol. 67, p. 380–400.
- Campbell, D. T.**, 1965, Variation and selective retention in sociocultural evolution. In: *Social Change in Developing Areas : A reinterpretation of evolutionary theory* (ed. H.R. Barringer, G.L. Blanksten and R.W. Mack), p. 19–49, Cambridge, MA, Schenkman
- Cavalli-Sforza, L. L., & Feldman, M. W.**, 1981, *Cultural Transmission and Evolution: A Quantitative Approach*, Princeton, NJ, Princeton University Press
- Christakis, N.**, 2010, *How social networks predict epidemics*, Available at: [Nicholas Christakis: How social networks predict epidemics](#) Accessed: 31.1.2021
- Cialdini, R. B.**, 1994, *Influence: The Psychology of Persuasion*, New York, Morrow
- Cision**, 2017, *Fazer establishes a new business area and buys the Finnish oat expert Bioferme*, Available at: <https://news.cision.com/fazer-group/r/fazer-establishes-a-new-business-area-and-buys-the-finnish-oat-expert-bioferme,c2217336> Accessed: 6.5.2020
- Cloak, F.T.**, 1975, Is a cultural ethology possible?, *Human Ecology*, vol. 3, no. 3, p. 161–182.
- Darwin, C.**, 1859, *On the origin of species by means of natural selection, or the preservation of favoured races in the struggle for life*, London: John Murray, [1<sup>st</sup> edition]
- Dawkins, R.**, 1976, *The Selfish Gene*, Oxford University Press. (Revised edition with additional material, 1989.)
- Delius, J.**, 1989, Of mind memes and brain bugs, a natural history of culture, In: *The Nature of Culture : proceedings of the international and interdisciplinary symposium* (ed. W.A. Koch), pp. 26–79, Bochum, Germany, Bochum Publications
- Dennett, D.**, 1995, *Darwin's Dangerous Idea*, London, Penguin
- Djerf, K.**, 2016, *Öppet bråk mellan Oatly och Svensk Mjolk*, Available at: <https://www.dagensmedia.se/marknadsforing/kampanjer/oppet-brak-mellan-oatly-och-svensk-mjolk-6087816> Accessed: 6.4.2021
- Durham, W. H.**, 1991, *Coevolution : Genes, Culture and Human Diversity*, Stanford, CA, Stanford University Press
- EatAndTheCity Oy**, 2016, *Helsingissä järjestetään tammikuussa vegaaniset messut*, Available at: <https://www.city.fi/opas/helsingissa+jarjestetaan+tammikuussa+vegaaniset+messut/10304> Accessed: 13.3.2021

- eatbigfish.**, 2016, *An interview with John Schoolcraft, the Creative Director of Oatly*, Available at: <https://thechallengerproject.com/blog/2016/oatly> Accessed: 11.5.2020
- Eskola, R.**, 2011, *Karppaaja, nauti hyviä hiilihydraatteja*, Available at: [https://www.hyvaterveys.fi/artikkeli/ruoka/karppaaja\\_nauti\\_hyvia\\_hiilihydraatteja](https://www.hyvaterveys.fi/artikkeli/ruoka/karppaaja_nauti_hyvia_hiilihydraatteja) Accessed: 15.3.2021
- Evans, A.**, 2020, *Veganuary: Do this year's dishes rival the Greggs vegan sausage roll?*, Available at: <https://www.bbc.com/news/uk-51006576> Accessed: 11.4.2021
- Feller, A.**, 2018, *BREAKING ALT-MILK NEWS: OATLY SAYS THERE'S AN OAT-MILK SHORTAGE BUT PLANS TO RESTOCK ASAP*, Available at: <https://www.wellandgood.com/good-food/oatly-barista-edition-oatmilk-shortage/> Accessed: 11.5.2020
- Festinger, L.**, 1957, *A Theory of Cognitive Dissonance*, Stanford, CA, Stanford University Press
- Forsell, T.**, 2016, *Finnish food maker Paulig buys 51 percent stake in meat substitute startup*, Available at: <https://www.reuters.com/article/us-gold-green-m-a-paulig-idUSKCN1174IL> Accessed: 22.4.2020
- Francis**, 2018, *An Oat Milk Scarcity Has Made My Life Miserable Of Late*, Available at: <https://www.barstoolsports.com/blog/1062408/an-oat-milk-scarcity-has-made-my-life-miserable-bearable-of-late> Accessed: 11.5.2020
- Friedman H., Prince, L., Riggio, R., Dimatteo, M.**, 1980, Understanding and Assessing Nonverbal Expressiveness: The Affective Communication Test, In: *Journal of Personality and Social Psychology*, vol 39, no. 2, pp. 333-351
- Friedman H. & Riggio R.**, 1981, Effect of Individual Differences in Nonverbal Expressiveness on Transmission of Emotion, In: *Journal of Nonverbal Behavior*, vol. 6, pp. 96-104
- Gladwell, M.**, 2001, *The Tipping Point : How Little Things Can Make a Big Difference*, First Bay Back Books edition, Little, Brown and Company, New York City
- Gold&Green Foods Ltd.**, 2020a, *Nyhtökaura*, Available at: <https://goldandgreenfoods.com/fi/tuotteet/nyhtokaura/> Accessed: 22.4.2020
- Gold&Green Foods Ltd.**, 2020b, *About Us*, Available at: <https://goldandgreenfoods.com/about-us/> Accessed: 22.4.2020
- Grant, G.**, 1990, *Memes: Introduction*, Available at: <http://pespmc1.vub.ac.be/MEMIN.html> Accessed: 20.4.2021
- Hamilton, W.D.**, 1964, The genetical evolution of social behaviour. 1, *Journal of Theoretical Biology*, vol. 7, no. 1, 1–16.

- Hatfield, E., Cacioppo, J. T., Rapson, R. L.**, 1994, *Emotional Contagion*, Cambridge, Cambridge University Press
- Heyes, C. M.**, 1993, Imitation, culture and cognition, In: *Animal Behaviour*, vol. 46, no. 5, pages 999–1010
- Hill, G.**, 2011, *Weekday Vegetarian: Finally, a Palatable Solution*, Available at: <https://www.amazon.com/Weekday-Vegetarian-Finally-Palatable-Solution-ebook/dp/B004ZMWEZI?asin=B004ZMWEZI&revisionId=d5e49f36&format=1&depth=1> Accessed: 22.4.2021
- Hitchens, A.**, 2018, *Hey, Where's My Oat Milk?*, Available at: <https://www.newyorker.com/magazine/2018/08/06/hey-wheres-my-oat-milk> Accessed: 11.5.2020
- Holopainen, S.**, 2012, *Ruokaterapeutti fleksitarismista: "Kuulostaa ihan normaalilta sekasyönniltä"*, Available at: <https://www.is.fi/laihдутus/art-2000000509379.html> Accessed: 24.3.2021
- Hoviruoka Oy**, 2018, *Kasvispiirakka 115g*, Available at: <https://www.hoviruoka.fi/tuotteet/kasvispiirakka-115-g> Accessed: 22.4.2020
- Hökerberg, J.**, 2019, *From oats to milk*, Available at: <https://www.dragonnews.se/executive-talk/2019/issue2/from-oats-to-milk/> Accessed: 11.5.2020
- IBS Center for Management Research**, 2020, *HOW OATLY CAME ABOUT*, Available at: <https://www.icmrindia.org/casestudies/catalogue/Marketing/Oatly%20AB-Case%20Study.htm> Accessed: 11.4.2021
- Italie, L.**, 2012, *F-bomb makes it into mainstream dictionary*, Available at: <https://www.washingtontimes.com/news/2012/aug/13/f-bomb-makes-it-mainstream-dictionary/> Accessed: 12.3.2021
- Joutsen, J. & Laatikainen H.**, 2009, *LOW CARB DIETS ARE EFFECTIVE! : Long term effects of low carbohydrate diets on adult obesity and health*, Available at: [https://www.theseus.fi/bitstream/handle/10024/6271/Laatikainen\\_Heikki%20ja%20Joutsen\\_Johanna.pdf?sequence=1](https://www.theseus.fi/bitstream/handle/10024/6271/Laatikainen_Heikki%20ja%20Joutsen_Johanna.pdf?sequence=1) Accessed: 15.3.2021
- Juustoportti Oy**, 2020, *Tuotekuvat & logot*, Available at: <https://www.juustoportti.fi/media-julkaisut/tuotekuvat-logot/> Accessed: 5.5.2020
- Jämsen, E.**, 2012, *Vaihtoehtoiset ruokavaliot yleistyvät - vähähiilihydraattisen dieetin suosio selvitetään*, Available at: <https://yle.fi/uutiset/3-5303119> Accessed: 15.3.2021



- Kamppila, P.**, 2017, *Fazer suuntaa uusille markkinoille, ostaa Yosa-yhtiön*, Available at: <https://www.ess.fi/uutiset/talous/art2355292> Accessed 12.1.2020
- Karppaaminen.fi**, 2019, *Karppaus ja ketogeeninen ruokavalio*, Available at: <https://www.karppaaminen.fi/karppaus-ja-ketogeeninen-ruokavalio/> Accessed: 15.3.2021
- Kateman, B.**, 2017, INTRODUCTION, In: *The Reducetarian Solution: How the Surprisingly Simple Act of Reducing the Amount of Meat in Your Diet Can Transform Your Health and the Planet*, Available at: <https://www.amazon.com/Reducetarian-Solution-Surprisingly-Reducing-Trans-form/dp/0143129716?asin=0143129716&revisionId=&format=4&depth=1> Accessed: 22.4.2021
- Kaukinen, M.**, 2018, *Fleksaaminen – kasvisruoan uusi aalto*, Available at: <https://www.atria.fi/konserni/ajankohtaista/nakoaloja-ruokaan/fleksaaminen--kasvisruoan-uusi-aalto/> Accessed: 8.2.2021
- Kelling, G. L. & Coles C. M.**, 1996, *fixing Broken Windows*, New York: Touchstone, p. 20.
- Kellogg Co.**, 2019, *A Foundation for the Future*, Available at: [https://www.kelloggcompany.com/en\\_US/our-heritage.html](https://www.kelloggcompany.com/en_US/our-heritage.html) Accessed: 10.5.2020
- KELLOGG Company**, 2020a, *Kellogg's UK History Timeline*, Available at: [https://www.kelloggs.co.uk/en\\_GB/our-story/kelloggs-in-the-uk.html](https://www.kelloggs.co.uk/en_GB/our-story/kelloggs-in-the-uk.html) Accessed: 10.5.2020
- KELLOGG Company**, 2020b, *FAQ*, Available at: [https://www.kelloggs.co.uk/en\\_GB/brands/w-k-kellogg.html](https://www.kelloggs.co.uk/en_GB/brands/w-k-kellogg.html) Accessed: 10.5.2020
- Klaar, A.**, 2014, *Oatlys kaxiga svar på stämningen*, Available at: <https://www.gp.se/ekonomi/oatlys-kaxiga-svar-p%C3%A5-st%C3%A4mningen-1.248812> Accessed: 6.4.2021
- Kosonen, A.**, 2013, *Anna-Liisa Kosonen: Tiukka kasvisruokavalio altistaa puutostaudeille*, Available at: <https://yle.fi/uutiset/3-6838686> Accessed: 24.3.2021
- Kotiliesi toimitus**, 2011, *Karppaajan viikon ruokalista*, Available at: <https://kotiliesi.fi/ruoka/karppaajan-viikon-ruokalista/> Accessed: 15.3.2021
- Krigbaum, M.**, 2018, *Inside the Great Oat-Milk Shortage*, Available at: <https://www.tastecooking.com/inside-great-oat-milk-shortage/> Accessed: 11.5.2020
- Krishna, P.**, 2018, *The Non-Dairy Milk You're About to See Everywhere*, Available at: <https://www.foodandwine.com/news/oat-milk-non-dairy> Accessed: 11.5.2020

- Kuukasjärvi, N.**, 2008, *Karppaus kadotti kilot ja toi hyvän olon*, Available at: <https://www.kaleva.fi/karppaus-kadotti-kilot-ja-toi-hyvan-olon/2263362> Accessed: 15.3.2021
- Kvist, A.**, 2015, *Mjölkkriget avgjort – Svensk mjölk segrade*, Available at: <https://www.svt.se/nyheter/lokalt/skane/mjolkkriget-avgjort-svensk-mjolk-segrar> Accessed: 6.4.2021
- Lamminen, K.**, 2013, *Lihaton lokakuu kerää tuhatpäin osallistujia*, Available at: <https://www.maaseuduntulevaisuus.fi/ruoka/lihaton-lokakuu-ker%C3%A4%C3%A4-tuhatp%C3%A4in-osallistujia-1.47564> Accessed: 11.4.2021
- Lappalainen, L.**, 2016, 3 *x kohtalona karppaaminen*, Available at: <https://yle.fi/aihe/artikkeli/2010/12/28/3-x-kohtalona-karppaaminen> Accessed: 15.3.2021
- Last, R. A. & Wilson, A. S.**, 2006, *Low-Carbohydrate Diets*, vol. 73, num. 11, American Family Physician, p. 1942, Available at: <https://www.aafp.org/afp/2006/0601/afp20060601p1942.pdf> Accessed: 15.3.2021
- Leinonen, N.**, 2011, *Muutakin kuin pekonia*, Available at: <https://www.iltalehti.fi/ruoka/a/2011120814674554> Accessed: 15.3.2021
- Lewis, T.**, 2018, *How we fell out of love with milk*, Available at: <https://www.theguardian.com/food/2018/nov/11/how-we-lost-our-love-milk-alt> Accessed: 6.4.2021
- Lewitschnik, L.**, 2019, *Against the grain*, Available at: <https://monocle.com/magazine/issues/126/against-the-grain/> Accessed: 11.4.2021
- Lucas, A.**, 2019, *Burger King's plant-based Impossible Whopper is launching nationwide this month*, Available at: <https://www.cnbc.com/2019/07/31/burger-kings-plant-based-impossible-whopper-is-launching-nationwide-this-month.html#:~:text=Burger%20King%20is%20launching%20the,available%20for%20a%20limited%20time>. Accessed: 30.3.2021
- Lumsden, C. J. & Wilson, E.O.**, 1981, *Genes, Mind and Culture*, Cambridge, MA, Harvard University Press.
- Luonto-Liitto**, 2021, The Finnish Nature League - Luonto-Liitto, Available at: <http://www.luontoliitto.fi/en> Accessed: 11.4.2021
- Lynch, A.**, 1991, *Thought contagion as austral evolution*, Journal of Ideas, vol. 2, no. 1, p. 3–10
- Lööf, R.**, 2015, *Mjölkkrig i mejeridisken*, Available at: <https://www.svt.se/nyheter/lokalt/skane/krig-i-mjolkdisken> Accessed: 6.4.2021

- Mallenbaum, C.**, 2019, *Why oat milk is the new 'it' milk alternative (sorry, soy and almond)*, Available at: <https://eu.usatoday.com/story/life/2018/08/10/oat-milk-so-hot-right-now-and-edging-out-soy-milk-almond-milk/928717002/> Accessed: 11.5.2020
- Mayo Clinic Staff**, 2020, *Low-carb diet: Can it help you lose weight?*, Available at: <https://www.mayoclinic.org/healthy-lifestyle/weight-loss/in-depth/low-carb-diet/art-20045831> Accessed: 15.3.2021
- Merriam-Webster Dictionary**, 2020, *Thesaurus*, Available at: <https://www.merriam-webster.com/thesaurus/vegan> Accessed: 29.3.2020
- Merriam-Webster, Incorporated**, 2021, *flexitarian*, Available at: <https://www.merriam-webster.com/dictionary/flexitarian> Accessed: 11.4.2021
- Milgram, S.**, 1967, The Small-World Problem, *Psychology Today*, vol. 1, no. 1, pp. 61-67
- Ministry of the Environment**, 2021, *The Kyoto Protocol*, Available at: <https://ym.fi/en/the-kyoto-protocol> Accessed: 28.3.2021
- Murray, J.**, 2019, *We're unconventional: Toni Petersson*, Available at: <https://www.theceomagazine.com/executive-interviews/food-beverage/toni-petersson/> Accessed: 13.5.2020
- Niiniahho, E.**, 2019, *Tämä mies päättää ruokakassisi sisällön: "Se on aika kova peli, mitkä tuotteista jäävät ikisuosikeiksi"*, Available at: <https://www.iltalehti.fi/ruoka-artikkelit/a/57b44f5f-43fe-4d37-84ba-416b37ab7d23> Accessed: 22.4.2020
- Nyt.fi toimitus HS**, 2015, *Ikea alkoi myydä myös vegaanipullia lihapullien rinnalla*, Available at: <https://www.hs.fi/nyt/art-2000002814680.html> Accessed: 6.4.2021
- Oatly**, 2018, *The Story*, Available at: <https://newsroom.notified.com/oatly/posts/news/the-story> Accessed: 10.5.2020
- Oatly**, 2019, *SUSTAINABILITY REPORT 2019*, Available at: <https://sustainability.oatly.com/> Accessed: 22.4.2021
- Oatly**, 2020a, *ABOUT OATLY*, Available at: <https://www.oatly.com/fi/about-oatly> Accessed: 10.5.2020
- Oatly**, 2020b, *QUESTIONS AND ANSWERS: Miksi en löydä oatlyn tuotteita enää?*, Available at: <https://www.oatly.com/fi/questions-and-answers> Accessed: 10.5.2020
- Oatly**, 2020c, *iKaffe-Lolla-SE.jpg*, Available at: <https://newsroom.notified.com/oatly/media/72831/ikaffe-lolla-sejpg> Accessed: 9.7.2020

- Oatly**, 2021, *OAT DRINK WITH CARBON DIOXIDE EQUIVALENTS*, Available at: <https://www.oatly.com/int/climate-footprint> Accessed: 22.4.2021
- Ojanperä, S.**, 2016, *Vegaanikin halusi mättöä ja sai oman lihapiirakan – pienen ruokatehtaan riski kannatti*, Available at: <https://yle.fi/uutiset/3-8674746> Accessed: 11.4.2021
- Oxford Advanced Learner's Dictionary**, 2020, *Definition of veganism noun from the Oxford Advanced Learner's Dictionary*, Available at: <https://www.oxfordlearners-dictionaries.com/definition/english/veganism?q=veganism> Accessed: 29.3.2020
- Oy Karl Fazer Ab**, 2020a, *Fazer Yosa Kauravälipala Metsämarja 250 g (2x125 g)*, Available: <https://www.fazer.fi/tuotteet-ja-asiakaspalvelu/7773/fazer-yosa-kaurav-alipala-metsamarja-250-g-2x125-g/> Accessed: 6.5.2020
- Oy Karl Fazer Ab**, 2020b, *Kaslink becomes a part of Fazer Lifestyle Foods*, Available at: <https://www.fazergroup.com/this-is-fazer/our-businesses/fazer-lifestyle-foods/kaslink-becomes-a-part-of-fazer-lifestyle-foods/> Accessed: 5.5.2020
- Oy Karl Fazer Ab**, 2020c, *Fazer Aito*, Available at: <https://fast.fazer.com/f/qQM6> Accessed: 5.5.2020
- Oy Gustav Paulig AB**, 2020, *Company History*, Available at: <https://www.paulig.com/en/company/company-history> Accessed: 22.4.2020
- Parkkinen, P.**, 2015, *Kouvolasta kajahtaa taas: "Vihis" on uusi hittituote*, Available at: <https://www.iltalehti.fi/pippuri/a/2015102720566662> Accessed: 22.4.2020
- Pasanen, A.**, 2018, *Kaurajuomat maistuvat nyt suomalaisille, meijerit tuovat kilvan uusia tuotteita – oululaiskauppias kertoo räjähdysmäisestä kasvusta*, Available at: <https://www.kaleva.fi/uutiset/kotimaa/kaurajuomat-maistuvat-nyt-suomalaisille-meijerit-tuovat-kilvan-uusia-tuotteita-oululaiskauppias-kertoo-rajahdysmaisesta-kasvusta/785114/> Accessed: 11.5.2020
- Paulig Group**, 2020a, *Poco Loco*, Available at: <https://www.pauliggroup.com/what-we-do/poco-loco> Accessed: 22.4.2020
- Paulig Group**, 2020b, *What We Do*, Available at: <https://www.pauliggroup.com/what-we-do> Accessed: 22.4.2020
- PETA**, 2020, *What is a vegan*, Available at: <https://www.peta.org/about-peta/faq/what-is-a-vegan/> Accessed: 29.3.2020
- Rafferty, J. P.**, 2011a, *r-selected species*, Available at: <https://www.britannica.com/science/r-selected-species>, Accessed at 23.1.2021
- Rafferty, J. P.**, 2011b, *K-selected species*, Available at: <https://www.britannica.com/science/K-selected-species>, Accessed at 23.1.2021

- Ranta, E.**, 2011, *Nyt syttyi ruokasota – kuka vedättää ketä?*, Available at: <https://www.is.fi/taloussanomat/art-2000001728337.html> Accessed: 15.3.2021
- Rantanen, T.**, 2016, *Fleksaus on nyt kuumin ravitsemustrendi*, Available at: <https://kotiliesi.fi/himahella/fleksaus-nyt-kuumin-ravitsemustrendi/> Accessed: 12.3.2021
- Reductarian Foundation**, 2020, *FAQ : What is reductarianism?*, Available at: <https://www.reductarian.org/faq> Accessed: 24.3.2021
- Reku, J.**, 2017, *Yosa-kauravälipalat siirtyvät yrityskaupassa Fazerille*, Available at: <https://www.maaseuduntulevaisuus.fi/ruoka/yosa-kaurav%C3%A4lipalat-siirtyv%C3%A4t-yrityskaupassa-fazerille-1.182291> Accessed: 12.1.2020
- Rescorla, R. A.**, 1988, *Pavlovian Conditioning It's Not What You Think It Is*, American Psychologist, 43(3), 151-160, Available at: [https://web.stanford.edu/class/psych227/RESCORLA%20\(1988\).pdf](https://web.stanford.edu/class/psych227/RESCORLA%20(1988).pdf), Accessed at 23.1.2021
- Richerson, P. J. & Boyd, R.**, 1989, *The role of evolved predispositions in cultural evolution : Or, human sociobiology meets Pascal's wager*, Ethology and Sociobiology, Elsevier Science Publishing Co.. Inc., New York, vol. 10, p. 195–219.
- Risenta AB**, 2020, *Lär känna oss*, Available at: <https://www.risenta.se/lar-kanna-oss-1> Accessed: 22.4.2020
- Ross, H.**, 2018, *Where Were You During the Great Oat Milk Crisis of 2018?*, Available at: <https://www.manrepeller.com/2018/12/oatly-is-the-best-oat-milk-but-what-about-the-shortage.html> Accessed: 11.5.2020
- Sachs, A.**, 2019, *Want to cut down on animal products but just can't give up bacon? Reductarians won't judge.*, Available at: [https://www.washingtonpost.com/life-style/wellness/want-to-cut-down-on-animal-products-but-just-cant-give-up-bacon-reductarians-wont-judge/2019/11/11/a51d2b9c-ffee-11e9-8bab-0fc209e065a8\\_story.html](https://www.washingtonpost.com/life-style/wellness/want-to-cut-down-on-animal-products-but-just-cant-give-up-bacon-reductarians-wont-judge/2019/11/11/a51d2b9c-ffee-11e9-8bab-0fc209e065a8_story.html) Accessed: 24.3.2021
- Salonen, H.**, 2012, *Unohda karppaus, nyt tulee fleksaus!*, Available at: <https://www.iltalehti.fi/elintavat/a/2012052315447056> Accessed: 24.3.2021
- Santa Maria**, 2020, *About Santa Maria*, Available at: <https://www.santamariaworld.com/uk/about-santa-maria/> Accessed: 22.4.2020
- Sarell, N.**, 2013, *Fleksaus eli osa-aikainen kasvisruokavalio villitsee maailmalla*, Available at: <https://anna.fi/hyvinvointi/fleksaus-eli-osa-aikainen-kasvisruokavalio-villitsee-maailmalla> Accessed: 24.3.2021
- Schildt, M.**, 2020, *Ilman Merja Scharlinin sinnikkyyttä kaurabuumi olisi voinut jäädä syntymättä – hän kehitti Yosa-tuotteet*, Available at: <https://yhteishyva.fi/ruoka-ja-reseptit/ilman-merja-scharlinin-sinnikkyutta-kaurabuumi-oli/60XMJAs0UkAf0l3QL9AkY3> Accessed: 6.5.2020

- Smith J. M. & Szathmary E.**, 1995, *The Major Transitions in Evolution*, Available at: [https://books.google.fi/books?hl=en&lr=&id=Qts6FAc-GGaIC&oi=fnd&pg=PP1&ots=nriRHY6HB0&sig=KB\\_JUAp55SgU4DD\\_1JomEP74zYE&redir\\_esc=y#v=onepage&q&f=false](https://books.google.fi/books?hl=en&lr=&id=Qts6FAc-GGaIC&oi=fnd&pg=PP1&ots=nriRHY6HB0&sig=KB_JUAp55SgU4DD_1JomEP74zYE&redir_esc=y#v=onepage&q&f=false), Accessed at 5.1.2021
- Speel, H-C.**, 1995, *Memetics: On a conceptual framework for cultural evolution*, paper presented at the symposium 'Einstein meets Magritte', Free University of Brussels
- Suominen, E.**, 2007, *Karppaus on elämäntapa*, Available at: <https://anna.fi/hyvinvointi/karppaus-on-elamantapa> Accessed: 15.3.2021
- Sveriges Kommunikationsbyråer**, 2015, *Oatly, Dålig stämning i kyldisken*, Available at: <https://guldagget.se/vinnare/oatly-dalig-stamning-i-kyldisken/> Accessed: 6.4.2021
- Sveriges Kommunikationsbyråer**, 2021, *Om oss*, Available at: <https://komm.se/om-oss/> Accessed: 6.4.2021
- TED Conferences LLC**, 2010, *Why I'm a Weekday Vegetarian*, Available at: [Graham Hill: Why I'm a weekday vegetarian?](#) Accessed: 24.3.2021
- TEDx Talks**, 2014, *TEDx: Ending the battle between vegans, vegetarians, and everyone else | Brian Kateman | TEDxCUNY* [YouTube video], Available at: [Ending the battle between vegans, vegetarians, and everyone else | Brian Kateman | TEDxCUNY](#) Accessed: 24.3.2021
- Terve.fi**, 2011, *Asiantuntija kertoo karppauksen hyödyt ja haitat*, Available at: <https://www.terve.fi/artikkelit/49721-asiantuntija-kertoo-karppauksen-hyodyt-ja-haitat> Accessed: 15.3.2021
- The Challenger Project**, 2016, *An interview with John Schoolcraft, the Creative Director of Oatly*, Available at: [An interview with John Schoolcraft, the Creative Director of Oatly](#) Accessed: 13.5.2020
- The Vegan Society**, 2020a, *History*, Available at: <https://www.vegansociety.com/about-us/history> Accessed: 29.3.2020
- The Vegan Society**, 2020b, *What is a vegan?*, Available at: <https://www.vegansociety.com/go-vegan/definition-veganism> Accessed: 29.3.2020
- TIME USA LLC**, 2018, *How Oat Milk Could Change the Way You Drink Coffee*, Available at: <https://time.com/5190977/how-oat-milk-could-change-the-way-you-drink-coffee/> Accessed: 11.4.2021
- Treehugger.com**, 2021, *About Us*, Available at: <https://www.treehugger.com/about-us-5024862> Accessed: 22.4.2021

**Trivers, R. L.**, 1971. The evolution of reciprocal altruism, *Quarterly Review of Biology*, vol. 46, no. 1, p. 35–56.

**Tuominen, M.**, 2017, *Meijerijätit ryntäävät kilvan vegaanimarkkinoille – Juustoportti avaa kaurajuomatehtaan*, Available at: <https://www.maaseuduntulevaisuus.fi/ruoka/artikkeli-1.218319> Accessed: 12.1.2020

**United Nations General Assembly**, 2006, *Resolution adopted by the General Assembly on 22 December 2005*, Available at: [https://www.un.org/ga/search/view\\_doc.asp?symbol=A/RES/60/192](https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/60/192) Accessed: 28.3.2021

**United Nations Global Marketplace**, 2021, *About UNFCCC*, Available at: <https://www.ungm.org/Shared/KnowledgeCenter/Pages/UNFCCC> Accessed: 28.3.2021

**United Nations Framework Convention on Climate Change**, 2010, *Copenhagen Accord*, Available at: <https://unfccc.int/sites/default/files/resource/docs/2009/cop15/eng/11a01.pdf>, p. 5-7, Accessed: 28.3.2021

**United Nations Framework Convention on Climate Change**, 2018, *List of Parties*, Available at: <https://unfccc.int/process/parties-non-party-stakeholders/parties-convention-and-observer-states> Accessed: 28.3.2021

**United Nations Framework Convention on Climate Change**, 2021a, *What is the United Nations Framework Convention on Climate Change?*, Available at: <https://unfccc.int/process-and-meetings/the-convention/what-is-the-united-nations-framework-convention-on-climate-change> Accessed: 28.3.2021

**United Nations Framework Convention on Climate Change**, 2021b, *Copenhagen Climate Change Conference - December 2009*, Available at: <https://unfccc.int/process-and-meetings/conferences/past-conferences/copenhagen-climate-change-conference-december-2009/copenhagen-climate-change-conference-december-2009> Accessed: 28.3.2021

**United Nations Framework Convention on Climate Change**, 2021c, *Cancún Climate Change Conference - November 2010*, Available at: <https://unfccc.int/process-and-meetings/conferences/past-conferences/cancun-climate-change-conference-november-2010/cancun-climate-change-conference-november-2010-0> Accessed: 28.3.2021

**United Nations Treaty Collection**, 2021, *Minamata Convention on Mercury*, [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=XXVII-17&chapter=27&clang=en](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-17&chapter=27&clang=en), chapter XXVII, section 17, Accessed: 30.3.2021

**Valio Ltd**, 2017, *Valio introduces Valio Oddlygood™ non-dairy product range made from Finnish oats*, Available at: <https://www.valio.com/articles/valio-introduces->

[valio-oddlygood-non-dairy-product-range-made-from-finnish-oats/](#) Accessed: 12.1.2020

**Valio Ltd**, 2019, *Meijeri ja ruokatalo - paremman elämän palveluksessa*, Available at: <https://www.valio.fi/yritys/> Accessed: 31.3.2019

**Vegaaniliitto ry**, 2020, *Tuotteet ja kaupat*, Available at: <https://vegaaniliitto.fi/arki/tuotteet-ja-kaupat/> Accessed: 4.5.2021

**Vegaanituotteet**, 2016, *Jokaiselle*, Available at: <https://www.facebook.com/Vegaanituotteet/posts/1242181349174429/> [Facebook post], Accessed: 30.3.2021

**Veganuary**, 2021, *WHAT WE DO : WHO WE ARE*, Available at: <https://veganuary.com/about/about-us/> Accessed: 24.3.2021

**Viilo, T.**, 2017, *Hapatuksen rautarouva teki suomalaisesta kaurasta miljoonabisneksen*, Available at: <https://www.maaseuduntulevaisuus.fi/tiede-tekniikka/hapatuksen-rautarouva-teki-suomalaisesta-kaurasta-miljoonabisneksen-1.203398> Accessed: 6.5.2020

**Williams, G. C.**, 1966, *Adaptation and Natural Selection : A Critique of Some Current Evolutionary Thought*, Princeton, NJ, Princeton University Press

**Young, S.**, 2019, *GREGGS IS LAUNCHING A VEGAN SAUSAGE ROLL*, Available at: <https://www.independent.co.uk/life-style/food-and-drink/greggs-bakers-vegan-sausage-roll-launch-date-price-animal-rights-peta-a8707266.html> Accessed: 11.4.2021

**Ziemann, M.**, 2016, *Vegaanivalmisruuista seuraava ilmiö – Ruokajätit taistelevat pahaa makua vastaan*, Available at: <https://yle.fi/uutiset/3-9229057> Accessed: 11.4.2021