

Active ingredients – Trends among consumers

A theoretical study about skincare active ingredient use and current trends among generation Z consumers.

Iida Hakulinen

Thesis for Bachelor of Beauty and Cosmetics, Beauty Care (UAS) - degree

Degree Programme of Beauty and Cosmetics

Vaasa 2025

DEGREE THESIS

Author: Iida Hakulinen

Degree Programme and place of study: Bachelor of Beauty and Cosmetics, Beauty Care, Novia UAS

Supervisor(s): Jaana Ylimartimo-Nybäck and Johanna Nykamb

Title: Active ingredients – Trends among consumers - A theoretical study about active ingredient use and current trends among generation Z consumers.

Date: 26.3.2025 Number of pages: 29 Appendices: 1

Abstract

The aim of this study was to examine the most popular active ingredients among the generation Z consumers. Also, to find out the main results searched for with active ingredients.

The topics brought up by the respondent include things like the functions of the skin, different active ingredients, skin aging and the effects of active ingredients for the skin. The purpose of this study was to educate the readers on different active ingredients and their functions with the theoretical framework of the thesis. The results of this thesis could also be helpful for beauty care professionals, making them more aware of the current skincare trends and ingredients looked for by gen Z consumers.

A mixed research method was used in the theoretical study and a questionnaire-based survey was used as a method to collect data. Content analysis method was used to analyze the data. The results of this study represented the active ingredients used and looked for among gen Z consumers and it portrayed the results wanted from skincare products.

In the result, the informants responded to questions regarding their use of active ingredients, looked for results and platforms that influence their purchasing decisions of skincare products.

The most used active ingredient among the generation Z informants was hyaluronic acid, following with vitamin C and retinol (vitamin A). The additional ingredients used by the informants included natural oils such as jojoba oil, tea tree oil and rosemary oil. The most looked for result from skincare products was hydration. Soothing and redness minimizing benefits were found to be the second looked for results of skincare products.

Language: English

Key Words: Skincare, Active ingredients, Consumer behavior, skincare trends

OPINNÄYTETYÖ

Tekijä: Iida Hakulinen

Koulutus ja paikkakunta: Bachelor of Beauty and Cosmetics, Vaasa

Ohjaaja(t): Jaana Ylimartimo-Nyback ja Johanna Nykamb

Nimike: Active ingredients – Trends among consumers - A theoretical study about active ingredient use and current trends among generation Z consumers.

Päivämäärä: 26.3.2025 Sivumäärä: 29

Liitteet: 1

Tiivistelmä

Tämän opinnäytetyön tavoite oli tutkia suosituimpia aktiivisia ainesosia Z-sukupolven keskuudessa. Tavoitteena oli myös tutkia halutuimpia lopputuloksia aktiivi ainesosien käytöstä.

Käsiteltäviin aiheisiin opinnäytetyössä kuuluu ihon toiminnot, eri aktiiviset ainesosat, ihon ikääntyminen ja aktiivisten ainesosien vaikutukset ihoon. Tämän näytetyön tarkoitus oli kouluttaa lukijoita eri aktiivisista ainesosista ja niiden käyttöaiheista teoreettisen kappaleen avulla. Tämän opinnäytetyön tulokset voisivat myös olla avullisia kauneusalan ammattilaisille, tuodessaan heille lisää tietoa ihonhoidon trendeistä ja Z-sukupolven etsityimmistä aktiivisista ainesosista.

Tässä teoreettisessa tutkimuksessa käytettiin sekatumkimusmenetelmää ja data kerättiin kyselytutkimuksella. Datan analysointiin käytettiin sisällönanalyysimenetelmää. Tämän tutkimuksen tulokset esittivät Z-sukupolven käytetyimmät aktiiviset ainesosat ja näyttää etsityt tulokset iholla näistä ainesosista.

Kuluttajat vastasivat kysymyksiin heidän aktiivisten ainesosien käytöstä, etsityistä tuloksista ja alustoista, jotka vaikuttivat heidän ostopäätöksiinsä.

Z sukupolven käytetyin aktiivinen ainesosa oli hyaluronihappo, jota seurasi C-vitamiini ja retinoli. Muihin käytettyihin ainesosiin lukeutui luonnollisia öljyjä, kuten jojobaöljy, teepuuöljy ja rosmariiniöljy. Etsityin tulos ihonhoitotuotteilta oli kosteutus. Toiseksi etsityin lopputulos oli ihon rauhoitus ja punoituksen vähentäminen.

Kieli: Englanti

Avainsanat: Ihonhoito, Aktiiviset ainesosat, Kuluttajien ostoskäyttäytyminen, ihonhoidon trendit

Table of Contents

Table of Contents.....	3
1 Introduction.....	4
2 Aim and problem specification	6
3 Theoretical framework.....	7
3.1 Skincare and active ingredients	7
3.1.1 Antioxidants and vitamins.....	8
3.1.2 Acids	11
3.1.3 Hyaluronic acid	13
3.1.4 Peptides.....	14
3.2 Visible effects of skincare on the skin.....	15
4 Previous research.....	17
5 Methodology.....	21
5.1 Selection of informants.....	22
5.2 Survey	22
5.3 Content analysis	23
5.4 Practical implementation of study.....	23
6 Result and interpret.....	24
6.1 Use of skincare	24
6.2 Ingredients.....	25
6.3 Purchasing behavior.....	27
6.4 Conclusion.....	30
7 Critical review	31
8 Discussion.....	32
References.....	33
Appendix 1	36

1 Introduction

In today's world, the beauty industry is rapidly growing and consumers have a wide range of cosmetic products to choose from and platforms to view content related to beauty. Many consumers might use skincare as a form of self-care and relaxation, but skincare also tends to be used for its properties and functions to make a difference to the skin. Beauty, like many other things is heavily linked to trends. There are constantly new products on the market with different functions and ingredients, but which ones of these are the most wanted by consumers and what are the results looked for with the use of these?

91% of people belonging to the generation Z are on Instagram and 86% on TikTok. (Miller, 2024). For many consumers belonging to the generation Z, social media serves as a good tool for finding new trends and learning information on different skincare products.

It is important to understand the reasons and motivations behind the consumers when they are selecting their skincare to purchase. Some might only purchase skincare products as a form of trying new trends, but the reason behind why a certain product or a cosmetic ingredient has achieved its platform might be more complex.

This thesis is going to explore the most used active ingredients among generation Z, along with the results looked for with them. Is generation Z already focused on anti-aging skincare in order to prevent the signs of aging, or are they using ingredients based on their own skin concerns?

2 Aim and problem specification

The aim of this research paper is to examine what are the most popular active ingredients currently among gen Z consumers and what are the results looked for among the people who use skincare products. The theory of this thesis can make consumers gain more knowledge on different active ingredients and their uses for the skin. The results of this thesis can help beauty care professionals to have a better understanding of the current active ingredients trending among the specific group of consumers.

The following objectives will be answered to:

1. What are the most popular active ingredients among consumers?
2. What are the results consumers are seeking with active ingredients?

3 Theoretical framework

The theoretical framework is going to cover the most common active ingredients in skincare and it will include an overview of each active ingredient's origin, benefits and their uses. The respondent will also cover the effects of skincare within the area of skin's appearance.

3.1 Skincare and active ingredients

Skin is the biggest organ in the body and it has many different functions such as regulating temperature, acting as a barrier between the insides, sweating out waste and helping protect from sun damage by producing melanin. The outermost layer of the skin, which is visible to the human eye, is the epidermis and it is made up from keratinocytes. The epidermis renews and regenerates constantly when new cells are made in the lowest layer and then travelling to the top. The skin has three main layers including the epidermis, dermis and subcutaneous tissue. Skincare offered over-the-counter will only treat the epidermis. (Hirons, 2021).

Cosmetics and personal care products are focused on the appearance of the outer surfaces of the body and they can be defined as something that can change the appearance of these surfaces, keep them in condition and protect them. (Barton, 2020).

Active ingredients can be natural or chemical and they are biologically active. These active ingredients tend to be the most potent ingredients in the skincare routine. Active ingredients can be found in a formula because of their ability to change and target different problems of the skin that the product advertises for. (Hirons, 2021).

In the skincare products, the list can be divided into two categories that are active and inactive. The inactive ingredients are usually there for the delivery method for other elements of the product formula. The most common active ingredients used in skincare are for example alpha hydroxy acid (AHA), vitamin c, hyaluronic acid, salicylic acid, retinol, ceramides, niacinamide and vitamin E. When selecting products and ingredients to use, it is important to keep in mind, that each active ingredient has different uses and side effects. A good place to start is usually with the identification of own skin type, so it is easier to know what are the results and affects to look for in the skincare products. When selecting the products and ingredients, it is good to know, that it is important to introduce new active ingredients slowly onto the routine in order to make sure it is easy to monitor the skin's reaction to them. It also might be a good idea to introduce the ingredients individually. (Somerville, 2020).

3.1.1 Antioxidants and vitamins

Antioxidants are incorporated for example in anti-ageing products due to their beneficial effects in preventing and minimizing the signs of skin ageing. (Silva et al., 2019)

Antioxidants stabilize free radicals to minimize the harmful effect of them and antioxidants are added to cosmetics to increase the natural antioxidant reserves of the skin. Free radicals on the other hand are molecules that can damage our body. Vitamins are also important antioxidants. (Barton,2020).

Antioxidants can be found in most of the skincare products in the market, except for cleansers and they also help protect the skin from external pollutants. (Hirons, 2021).

Vitamins are vital to our bodies and they can be consumed through our diet, but vitamins also add good benefits when applied to the skin topically. Vitamins can come from natural origin, like in fruits and vegetables from our diet, but the vitamins used in skincare products are usually synthetic. The main reason behind this is that vitamins with natural origin can degrade quite quickly once exposed to air, temperature and light. (Barton, 2020).

Vitamin C

Vitamin C (L-ascorbic acid) is a water-soluble vitamin and it is a naturally occurring antioxidant. Vitamin C can be found in many citrus fruits and in dark green, leafy vegetables for example. Vitamin C absorbs well by the intestines, but the best way to receive the skin benefits on vitamin C is topical application. The active form of vitamin C, L-ascorbic acid can quickly get oxidized when getting exposure to air and this can result the product turning yellow. More recent formulations have produced chemically modified forms of ascorbic acid and they are produced by esterification of the hydroxyl group. These derivatives are for example magnesium ascorbyl phosphate (MAP), sodium ascorbyl phosphate, ascorbyl-6-palmitate and ascorbyl tetraisopalmitate (ATIP). These derivatives compared to L-ascorbic acid are more stable and preferred by cosmetic chemists. Vitamin C is an antioxidant and it also has photoprotection effects by neutralizing free radicals, reducing sunburn cell formation and reducing UV-induced immunosuppression for example. Vitamin C also preserves collagen by increasing stability and decreasing heat sensitivity of collagen. Vitamin C lightens hyperpigmentation and acts as anti-inflammatory. Lightening of the hyperpigmentation is caused by vitamin C's ability to work as a reducing agent for melanin and melanin intermediates. (Farris, 2013).

Niacinamide

Niacinamide is vitamin B3 and it is an essential nutrient. Vitamin B3 can be found in many foods like nuts, meats and legumes. When vitamin B3 is used as a topical skincare product, it can be divided into three primary forms including niacinamide (nicotinate), nicotinic acid and nicotinate esters (benzyl nicotinate, myristoyl nicotinate). (Farris, 2013).

When used topically with skincare, niacinamide can offer different benefits for the skin. Niacinamide can help with the treatment of hyperpigmentation by blocking the enzyme responsible for pigmentation. By stimulating cellular repair and boosting moisture retention, niacinamide can prevent the signs of aging skin. Niacinamide can also help soothe inflammation and this way reduce the appearance of redness. With niacinamide, there can also be skin-clearing benefits from niacinamides ability to regulate oil production and balancing the skin's moisture content. (Somerville, 2022).

Vitamin A

Vitamin A as a term, is used to describe a group of molecules all derived from retinal. Retinal is a chemical converted from β -carotene, which is the substance that makes carrots orange. In the group of vitamin A molecules, there is retinol, retinyl esters (retinyl palmitate, retinyl stearate) and retinoic acid. The most common derivatives used in the cosmetic industry are retinol and retinyl palmitate. Retinyl palmitate is a reaction product when combining retinol and palmitic acid and it is much more stable. Vitamin A can be obtained from plants such as colorful fruits and vegetables. From animal foods, it can be found in liver, whole milk, cheese and whole eggs for example. Retinol has been viewed to be good for anti-aging. Retinol can help with the reduction of fine lines and wrinkles because of its reported help on increasing the collagen and elastin content of the skin. Another known benefit of retinol is its power to reduce discoloration and improve skin tone by minimizing melanin formation. (Barton, 2020).

The best time to start using products containing retinol depends on the person's skincare concerns. For teens dealing with acne, retinol can be incorporated into the skincare routine, because of retinol's function to reduce acne. For preventing fine lines and other signs of aging, the use of retinol can be started in the 20s to 30s. In the 40s and 50s when the signs of aging have occurred, retinol can be used to treat them. Retinol can be irritating for the skin if used too frequently or the formulation is too strong. Retinol is recommended to start with a lower percentage formula and slowly increasing the usage while the skin can adapt to the ingredient. (Valenti, 2024).

Vitamin E

Vitamin E is an oil-soluble and it is a stable ingredient. The used term vitamin E covers a group that consists of eight fat-soluble compounds and they can be found in oils that we use everyday such as sunflower oil and olive oil for example. These compounds are four tocopherols and four tocotrienols. Vitamin E works by protecting the cell membranes in our skin by stopping the production of free radicals or peroxides. The attacking of these free radicals or peroxides can result to a compromise in the skin's natural barrier or in ageing of the skin. (Barton, 2020).

Because vitamin E has antioxidant properties, it has emerged as a popular topical treatment for many skin disorders for example. Many anti-aging creams contain 0.5%-1% of vitamin E and these creams are available over-the-counter. (Keen & Hassan, 2016) In moisturizers, vitamin E can stop skin from losing moisture and protect cells from damage. Moisturizers containing vitamin E can also prevent other substances from penetrating the skin and reduce irritation. (Kassouf, 2022).

3.1.2 Acids

Hydroxy acids (HA) are a class of compounds which have been used in cosmetic products to achieve different benefits for the skin. The most frequently used classes of hydroxy acids are alpha hydroxy acids (AHA), beta hydroxy acids (BHA), polyhydroxy acids (PHA) and bionic acids (BA). Hydroxy acids have been used to treat for example acne, keratoses, psoriasis and photoaged skin typically in concentrations ranging from 2% to 70%. The anti-aging effects of hydroxy acids have become prominent factors in cosmetic dermatology and there is beneficial effects on improving photoaged skin with hydroxy acids. These photoaging improvements have been measured for example as decreases in roughness, discoloration of the skin and increased density of collagen. Preparations containing hydroxy acids are used both as exfoliants and moisturizers. When in low concentrations like 4%-10%, hydroxy acids can be found as nonprescription creams and lotions being effective for skin aging. In high concentrations like >20%, they can be used as chemical 'peels' for example to treat calluses, keratoses and acne. (Kornhauser, Coelho & Hearing, 2010).

Alpha hydroxy acid (AHA)

Many AHAs are present in fruits and foods and therefore AHAs are known as fruit acids. The most commonly used AHAs are Glycolic acid, lactic acid, citric acid and mandelic acid. Skin benefits especially with AHAs are exfoliation and cell turnover, anti-aging across all of the skin layers and stimulation of the dermal biosynthesis (GAGs, collagen).

AHAs can be used on normal skin types, if the skin is not sensitive. (Farris, 2013).

By removing rough and flaky skin, can AHA's reduce the appearance of dry skin and blemishes, irritation free. AHA's can even prevent acne by removing the dead skin cells that block the pores. AHA's can act as a good alternative to other types of exfoliation, such as face scrubs, that can be abrasive for the skin. (Sissons, 2021).

Beta hydroxy acid (BHA)

Beta hydroxy acids mainly are used as exfoliants and they are reported to improve the look of wrinkles, roughness and photodamaged skin. A common BHA, salicylic acid is derived from acetylsalicylic acid or aspirin and it retains many anti-inflammatory properties. BHAs are found to be less irritating than AHAs, even though they penetrate deeper into the pores, making them suitable for oily skin types with whiteheads and blackheads. (Brannon, 2024).

The main difference between AHAs and BHAs is their solubility, as beta hydroxy acids are lipid-soluble and alpha hydroxy acids are water-soluble. BHAs are a good option for oilier skin types, since the structure allows them to penetrate into the skin through sebaceous follicles. In skincare formulations, beta hydroxy acids are usually found in concentrations of 1-2%. (Moghimpour, 2012).

Polyhydroxy acid (PHA)

Polyhydroxy acids, the second generation AHAs are many naturally occurring endogenous metabolites of the human body. Gluconolactone is a PHA used in cosmetic formulations and while it is quite similar to glycolic acid by its effects, it offers gentleness, increased hydrating capacity and antioxidant effects.

Skin benefits with PHAs include anti-aging effects with no irritation, skin barrier functions building effects and it helps to preserve skin's natural elasticity.

PHAs can be used on sensitive skin, rosacea-prone and acne-prone skin. (Farris, 2013).

Bionic acid (BA)

Bionic acids on the other hand are the third-generation AHAs. Bionic acids are larger molecules than AHAs, but they are still small enough to penetrate skin. Bionic acids used in cosmetic formulations are lactobionic acid and maltobionic acid. Bionic acids attract and retain water and they also possess antioxidant and chelation properties.

Bionic acids are highly moisturizing and they help to reduce pigment production.

Bionic acids are used on all skin types to bring moisturization and they can also be used for post-procedure conditioning. (Farris, 2013).

3.1.3 Hyaluronic acid

Hyaluronic acid (HA) is a sugar-based molecule that can bind water very well. HA can be found throughout the human body where it helps to speed up tissue repair. As the human body ages naturally, the amount of HA decreases in the body and as new skin cells are not being produced as quickly, the skin tends to become more dry and dull as we age. HA helps with locking in moisture into the skin and leaves the skin to be more hydrated, while also improving the look of fine lines and wrinkles by creating a protective film onto the skin's surface. (Danjuma, 2024).

Hyaluronic acid is able to bind moisture in up to 1,000 times its own weight and when hyaluronic acid is applied topically, it also helps the skin heal after injury. (Hirons, 2021).

A common method for using hyaluronic acid is through a serum or a moisturizer containing the ingredient. Hyaluronic acid can also occur in products like sheet masks or facial mists. While hyaluronic acid is a great way to attract and retain moisture, it does not substitute for a moisturizer. The best results and the optimal hydration are offered through using both a product containing hyaluronic acid and following with a moisturizer. (Sawers, 2024).

HA comes in different molecule sizes and effects can be quite different as well. HA used within skincare binds water and offers hydration for the skin, but with larger HA molecules, they cannot penetrate into the skin and the hydration is only offered to the surface of the skin. Smaller HA molecules are able to penetrate deeper into the skin, offering more surface hydration. (Liu, 2020).

3.1.4 Peptides

Peptides are short-chain amino acids and they act as the building blocks of protein. Peptides help the body at creating proteins such as elastin, collagen and keratin – that are found in the human skin. All of these proteins work to improve the skin's texture, strength and resiliency for example and by applying peptides to the skin's surface, the body receives a message to make more of these proteins that boost the skin. Peptides are easily absorbed by the skin, because they are fragmented portions of proteins. (Somerville, 2024).

Peptides can be found commonly in serums and in many products meant for anti-aging, since their properties of supporting collagen production to helping smooth out lines. (Hirons, 2021).

The peptides used in cosmetics are typically synthetic, but peptides do exist naturally in the skin. The reason behind using synthetic peptides is because of how expensive natural peptides can be and how inefficient they are to produce. In cosmetics, peptides are used because of their potential to modify how skin cells behave. Peptides are often be used together behind effective skincare products and they can even be attached to other cosmetic compounds as a delivery system. The most common peptide blend is a combination of synthetic peptides palmitoyl tripeptide-1 and palmitoyl tetrapeptide-7 and it is included in many cosmetic products because of it's reported ability to address the signs of ageing. Peptides can be very effective for the skin, but generally there is a need to continue using a product for a extended period of time in order to see the benefits and this is because the results are usually progressive. (Barton,2020).

3.2 Visible effects of skincare on the skin

After the application of a skincare product, there are some changes in the skin's appearance. These changes can be divided into two categories: immediate changes and longer term changes. A fast way to see immediate changes on the skin's appearance is moisturization. Dry skin can look more blurred because of the dead corneocytes build up on the skin. When the skin is well-moisturized and exfoliated, the surface of the skin will also appear smoother and brighter. The immediate change with even a simple moisturizer application can be seen with an electron microscope in Figure 1, as the left side is before moisturizer and the right side is after the application of a moisturizer. (Barton, 2020).

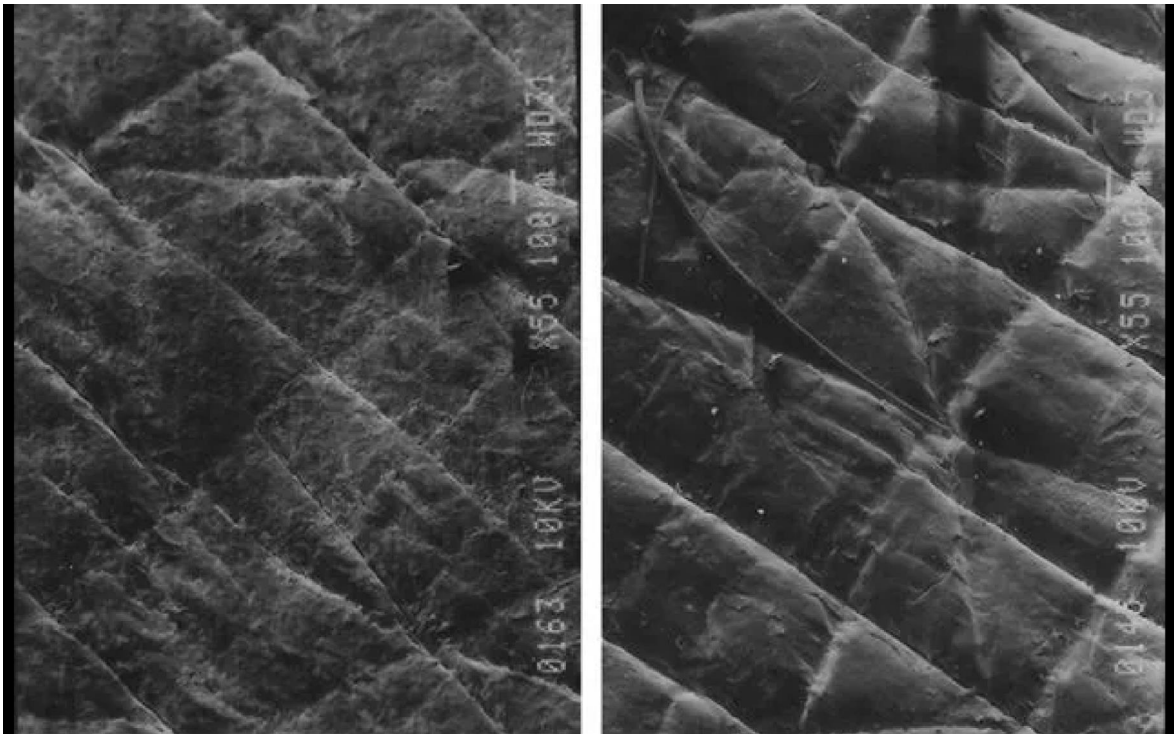


Figure 1: Scanning electron microscope images showing the difference between dry and moisturized skin surfaces. (Barton, 2020).

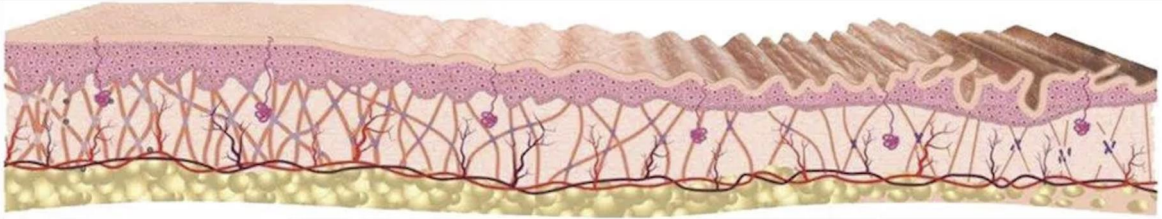
Moisturization is an essential function of skincare. It hydrates the skin and also helps with the skin's barrier function. The outer layer of the skin (stratum corneum) is made of dead skin cells but is still active and needs moisture for its functions. The stratum corneum has enzymes helping the skin stay healthy and these enzymes won't be able to function as needed when the skin is dry. (Dreher, Jungman & Sakamoto, 2023).

Active ingredients being used can define the longer term changes that are visible on the skin and skincare products can influence the appearance of the skin when the skin goes through the ageing process. (Barton, 2020).

Aging skin's appearance

The visible changes of natural aging of the skin include fine lines, thinning of the skin, atrophy and dryness. Complete renewal of the epidermis takes 40 to 60 days in the elderly, while with young adults the renewal is only estimated to take 28 days. (Rodan, Fields & Majewski, 2016).

The changes in the skin start to occur in our 20s as the skin cell turnover starts to slow down and by the time of our 30's, so does the natural desquamation process resulting to a slower rate of collagen production. Later on, the epidermis of the skin starts to thin and the fat layer beneath the skin begins to reduce. The reduced production of melanin will leave the skin more prone to uneven skin tone and age spots and the loss of the skin structure leads to skin's sagging and wrinkles. (Barton, 2020).



20's	30's	40's	50+
Cell turnover in the epidermis begins to slow down. Hormone imbalance from teen years settles. Skin can be at its optimum adult appearance.	Desquamation from the SC starts to gradually slow. Cell turnover continues to decline.	Lipids start to decline. Barrier function reduces leading to greater trans epidermal water loss (TEWL), epidermis begins to thin as cell turnover continues to decline and the junction between the epidermis and dermis becomes flatter. Surface starts to become more uneven, fine lines and wrinkles begin to appear as structural integrity declines in dermis.	SC can begin to thicken as desquamation continues to decline. Epidermis continues to thin, melanocytes reduce but control of the ones that remain becomes disordered resulting in age spots and uneven colouring. Structural elements continue to decline, sagging occurs at jowls and eyelids, wrinkles deepen. Loss of fat cells in hypodermis further reduces volume and enhances sagging appearance.

Figure 2: Visible skin changes with increasing age. (Barton, 2020).

Wrinkles and sagginess of the skin are often associated with skin aging and these changes are classified into two types of wrinkles: transient wrinkles and fixed wrinkles. Transient wrinkles are often caused by facial movements and expressions. These wrinkles disappear after the face returns to its natural state. The skin's natural deterioration as the skin ages makes it harder for the skin to recover after movement and expressions and this is when fixed wrinkles are caused. Fixed wrinkles are commonly noticed at the areas of the skin where there is more movement. The most common location for fixed wrinkles is the face because of its facial expressions. Sagginess of the skin is mainly located in the face and caused by gravity. Sagginess can for example occur as marionette lines, nasolabial folds and sagging of the lower cheeks. (Dreher, 2023).

4 Previous research

In this chapter, previous research has been collected from the areas of purchasing behavior, trends and ingredients within the area of skincare products. The search engine chosen by the respondent is Google Scholar, using the following keywords: active ingredients, skincare, purchasing behavior of skincare and skincare trends. All of the following researches were found with Google Scholar.

Yip (2024) investigated the current anti-aging trends in Australia and effect of the covid pandemic on these trends. The researcher identifies that the skincare trends in Australia before the pandemic were focused on wrinkle prevention with active ingredients like retinoids and alpha hydroxy acid-based products. During the pandemic these tendencies began to change due to different skin issues including irritated skin and acne. In this study it was shown that more people wanted to promote skin wellness and use ingredients that protect their skin barrier after the pandemic. According to the study, the most googled ingredient in Australia (2021) was hyaluronic acid, whereas retinol was placed fifth on the list. The findings of this study suggest that the population of Australia is aiming more to promote skin health and placing emphasis on the search for overall wellness.

Kumari & Khurana (2013) examined the current trends and market preparations of cosmeceuticals. In this study there were different categories of cosmeceuticals identified and the existing classes of compounds were explored. The categories included sun care, antioxidants, anti-aging ingredients and anti-inflammatory ingredients. The conclusion of this study was that the usage of cosmeceuticals has radically risen and the demand for natural cosmeceuticals. The study states that natural personal care is growing rapidly and the rise of it's category can be due to the trend towards self-treatment and wellness. The researcher advises that the consumer behavior and attitudes must be measured in order for the companies to produce suitable products for the target audience and also market the right products for them.

Shim, Woo, & Park (2024) assessed the clean beauty trend among millennial and generation Z consumers. The key attributes of this study were sustainability, safety and ethicality. The findings of this study reveal that 21.7% of the participants agreed that clean beauty strongly affected their selection of cosmetic products. More than half of the participants reported to look over the entire ingredient list of the product, while 36.7% reported that they would only check for certain ingredients. The most important attribute according to the results of this study was environmental safety, while ethicality was considered to be the least important. The results of this study also show that between the two age groups, there were no significant differences regarding the preferences for clean beauty.

Hasan & Maniar (2022) review the product attributes and user perception determining purchasing behavior for skincare products. The six variables examined were product quality, price, environmental consciousness, perceptions, marketing communications and product safety. The findings of this study show that all of the variables had a positive relationship with purchasing decision. According to the results, product quality had the biggest positive correlation with the coefficient value of 0,693 and p-value of 0,01. The factor with the lowest positive correlation found in the study was marketing communications. The researchers of this study recommended companies to improve the perceived quality of products as the consumers start to gain information from many different sources.

Lee, Goh, & Noor (2019) investigated the purchase intentions of university students towards skincare products and examined the factors contributing to the intention of purchasing. In this study, there were four factors included: brand association, brand awareness, perceived quality and brand loyalty. The findings of this study revealed that all of the variables used had a positive relationship with influencing consumers purchase intention. The most significant factor was revealed to be perceived quality and according to the researchers it is important that firms focus on the quality attributes that are important to both consumers and the industry. This is in order to obtain the competitive advantage over the competitors.

Kamwendo & Maharaj (2022) investigated the attribute preferences of cross-category skincare products of consumers in Durban. The study had as its objectives:

To identify consumer product attribute preferences for skincare cross-category products in Durban and to identify product attribute preferences for skincare cross-category products for consumers with different demographic profiles.

In this study, a quantitative research method was used to collect data from consumers within the city of Durban and a total of 213 respondents took part in the study with the majority of the respondents (43.7%) belonging to generation Z.

The highest score of all the attributes received durability. The brand of the skincare product was placed second and product strength received the third place. The least important attribute according to the answers was scent. The respondents also preferred skincare products with the durability of three weeks instead of two weeks.

The conclusion on this study was that durability of the skin care product was the most important attribute to according to the respondents. According to the researchers, the growing economic pressure has forced consumers to care more about which type of a product are they purchasing than just about the brand of the skincare product.

Choi, Kim, & Lee (2022) examined the changes in consumers' awareness and interest in cosmetic products during the pandemic. The results of this study confirm that the awareness of skincare products had changed and the perspectives of beauty were impacted by the pandemic. The researchers found that there was a positive impact on

skincare products during the pandemic, but a negative on makeup products. According to the researchers, the SOP increased consumers' interest in skincare products and the anxiety regarding COVID-19 effected the interest in skin conditions.

The increasing demand for more wellness-based and natural cosmetics can be seen in the study by Kumari & Khurana (2013), where the findings show that the demand for natural cosmeceuticals has risen. The findings of Yip (2024) also stated that Australians have started to focus more on wellness and skin health during the pandemic when the trends shifted from wrinkle reduction to wanting to protect the skin barrier more. Choi, Kim, & Lee (2022) also examined the changes of the pandemic to skincare. The findings of the study suggest that the consumer interest in skincare increased during the pandemic.

Shim, Woo, & Park (2024) highlight the shift towards more natural and sustainable skincare. Sustainability and ethicality are becoming more important to consumers and they are factors included when choosing the products to purchase.

When examining the purchasing intentions of cosmetics, Lee, Goh, & Noor (2019) found that perceived quality of the cosmetic product was the most significant factor. Hasan & Maniar (2022) also found that product quality was the biggest factor when reviewing the product attributes and purchasing behavior of skincare products.

Kamwendo & Maharaj (2022) also examined different attributes like brand loyalty and product effectiveness. The findings of this study showed that durability was the most important attribute.

5 Methodology

The data collecting method chosen by the respondent for this study is a survey in the form of a questionnaire. Data analysis is used for analyzing data for different purposes. The process of data analysis involves inspecting, transforming and modeling data in order to draw useful insights from it. (Neo, 2024). The method used for analyzing the content of data is content analysis.

The aim of this survey is to get information on what are the ingredients most chosen by gen Z consumers and what are the results looked for behind purchasing these specific ingredients.

In this study, the respondent used a mixed research method in order to receive more diverse data on the topic and achieve the aim of the thesis. Mixed method research is an approach where researchers analyze and collect both quantitative and qualitative data in the same study. Mixed method research allows researchers to discover diverse perspectives and the opportunity to explore the connections between complex research questions when holding the potential strength of both qualitative and quantitative methods. (Shorten & Smith, 2017).

Quantitative research method gathers a range of numeric data and allows researchers to conduct statistical analyses that aggregate the data and show relationships among the data. Methodologies such as questionnaires are included in quantitative research. (Coghlan & Brydon-Miller, 2014).

Qualitative research method gathers participants behavior, experiences and has the ability to explain processes and patterns of human behavior. Qualitative research asks open-ended questions and collects data, that is non-numerical. (Tenny & Brannan, 2022).

5.1 Selection of informants

The respondent used generation Z for this study as a target group. Generation Z consists of individuals born between 1997 and 2012. (Slepian & Furman, 2024).

This target group was selected by the respondent in order to receive the most accurate and diverse information on the topic of the thesis and in order to get more knowledge of generation Z within this topic.

5.2 Survey

Surveys are used as a method of collecting data and they are good for finding out characteristics, opinions, preferences or beliefs of a group of people. Survey research implies collecting information by asking questions from a group of people and analyzing the results. Surveys are a versatile method of data collection that can be used in many different types of research. (McCombes, 2019).

The creation of questions that accurately measure the experiences, opinions and behaviors of the participants of the survey is a crucial step to consider in the making of survey. The writing of good questions and organizing them to a form of a questionnaire is very important, while identifying what topics the survey will cover. (Pew research center, 2025).

It is important to keep surveys short and to the point, so they are not answered too hastily. The creating of clear and understandable questions can lead to better research success as well. (Fisher, 2023).

5.3 Content analysis

Content analysis enables the reduction of events into defined categories for easier analysis and interpretation. As a methodology, content analysis can be both qualitative and quantitative. (Harwood, 2003).

Content analysis is used by researchers to find out about the purposes and effects of communication content. Various possible goals of content analysis include finding correlations and patterns in how concepts are communicated, understanding the intentions of individuals or a group and analyzing the audience responses and the information. (Luo, 2023).

When conducting content analysis, text is coded into categories that can be grouped into broader categories in order to summarize the data. Content analysis can be used to identify for example communication trends, revealing cultural differences and improving surveys. (Columbia mailman school of public health, 2025).

5.4 Practical implementation of study

The respondent started by gathering information through literature and previous research within the topic of the thesis, resulting to a better understanding of the topic. The respondent decided to make a survey in order to collect data, and the selection of questions was based on how to best reach the aim of the thesis. The most relevant parts of the theoretical framework were used as a guide for the planning of the survey questions. (see appendix 1).

The survey was made through Microsoft forms, and the questions consisted from single-choice questions and open-ended questions aligning with the research method chosen. These questions included phrases such as “what are your most used active ingredients” and “do skincare trends effect your purchasing decision”.

The final survey (see appendix 1) was shared individually to possible informants who use skincare through a text-message and the respondent received 26 answers in total. The answers of this study consisted from informants who identify themselves as female and other.

When the survey responses were collected, the respondent reviewed and examined the answers, while organizing them into suitable categories.

6 Result and interpret

In this chapter, the results of the survey (see appendix 1) are examined by the respondent. The aim of the study was to examine the most popular active ingredients among consumers and results looked for with the use of them. The respondent investigated the differences

between the most used and looked for active ingredients by the informants and also what effects the purchasing decision of the informants.

Content analyzing method was used to determine the results and the results were divided into three categories and sub categories by the respondent. The three categories were use of skincare, ingredients and purchasing behavior. The sub categories were results from skincare products and sources and platforms. The informants were all members of the generation Z and all of the informants use skincare products. The informants of the survey identified both as woman and other. Figures are used to present parts of the survey.

6.1 Use of skincare

The informants were asked on how often they use skincare products to establish how relevant the topic is for them and to get a better understanding of the skincare habits behind the use of only specific ingredients. The majority of the informants, 85% agreed to use skincare daily. 15% say that they use skincare two to three times a week.



Figure 3: The use of skincare

Results from skincare products

The informants were asked about what results do they look for in skincare products. Figure 4 illustrates the results from this question. 35% said that they look for hydration from their skincare products. 27% chose soothing and redness minimizing benefits. 16% of the

informants chose reduction of pores and oil-control. 13% chose anti-aging benefits, 6% chose reduction of hyperpigmentation and 2% chose the option other.

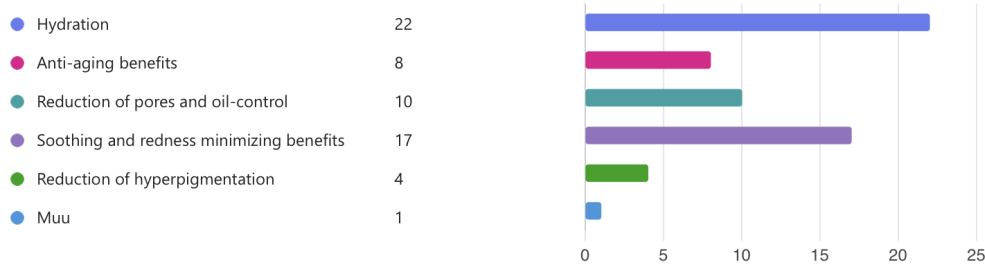


Figure 4: Results looked from skincare products

6.2 Ingredients

Figure 5 illustrates the informants’ tendency to check the list of ingredients on a skincare product. 42% of the informants do not check the list of ingredients. 38% say that they check the list of ingredients, but they only look for specific ingredients. 19% of the informants check all of the ingredients of the skincare product.



Figure 5: Checking of the ingredient list

The aspects considered by the informants when checking the ingredient list of products was checking that the product does not contain alcohol or perfumes. Products were also checked for not having added colors. The ingredients that were wanted to be in the product

and therefor checked from the ingredient list by the informants, consisted of moisturizing and soothing ingredients such as hyaluronic acid and centella asiatica.

Figure 6 illustrates the ranking of the most used active ingredients to the least used. Hyaluronic acid was ranked the most used ingredient among the informants, following with vitamin C as the second highest. The third most used ingredient was retinol (vitamin A). The third most used ingredients were AHA, BHA and PHA (exfoliating acids). Vitamin E was ranked as the fifth and niacinamide as 6th. Peptides were ranked 7th and ceramides 8th. The option other was ranked last by the informants.



Figure 6: Most used active ingredients

When the informants were asked about the other used ingredients, natural oils like jojoba oil, rosemary oil and tea tree oil emerged as the most popular choice.

6.3 Purchasing behavior

Figure 7 illustrates the informant's tendency to be influenced by skincare trends when purchasing skincare products. 42% of the informants say that skincare trends do not affect their purchasing decisions, while 35% of the informants say that they do. 23% of the informants agree that skincare trends somewhat affect their purchasing decisions.



Figure 7: The influence of skincare trends on the purchasing decision

When asked about the impact of trends on purchasing decisions, the answers revealed that the products associated with these trends were not suitable for the informants' skin types, making them unlikely to purchase.

The informants expressed a preference for maintaining their current skincare routines, avoiding new products that could potentially disrupt their skin's balance. Skin conditions such as eczema, sensitive skin and itchy skin were revealed to be factors not to purchase the skincare products from trends.

Sources and platforms

The informants were asked about the platforms and sources that effect their purchasing decision of skincare products, and it is illustrated in figure 8.

26% of the informants said that friends and family influence their purchasing decision of skincare products the most. 24% say that social media has the biggest influence. 16% chose skincare professionals and 12% chose recommendations from influencers and celebrities. 7% of the informants said that online reviews influence them the most and also 7% chose in- store displays. 1% chose online retail websites, while 1% chose the option other.

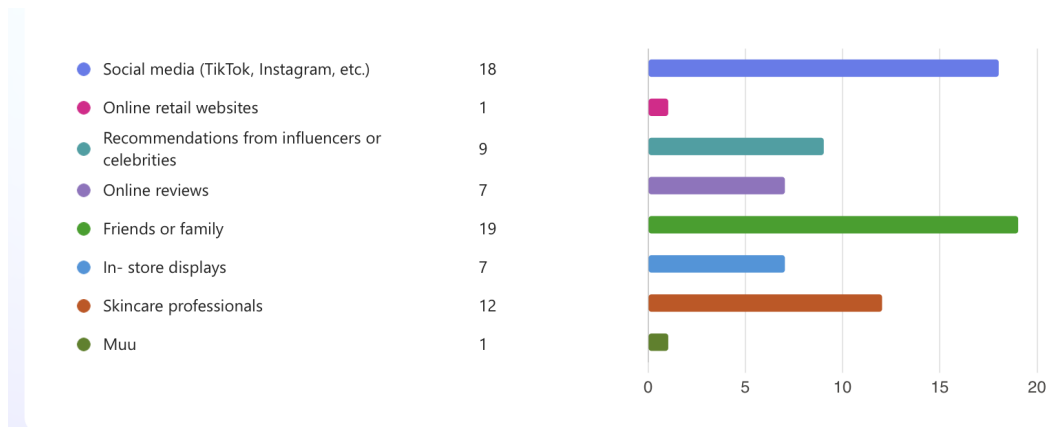


Figure 8: Platforms and sources influencing the purchasing decision of skincare products

Figure 9 illustrates the platforms and sources that effect the informants’ purchasing decision of skincare products containing a specific ingredient. 30% of the informants said that friends and family effect their purchasing decision. 25% chose social media. 18% of the informants chose skincare professionals, 12% chose recommendations from influencers and celebrities, 7% chose online reviews and 5% chose in- store displays. 2% of the informants said that online retail websites effect their purchasing decision and 2% chose the option other.

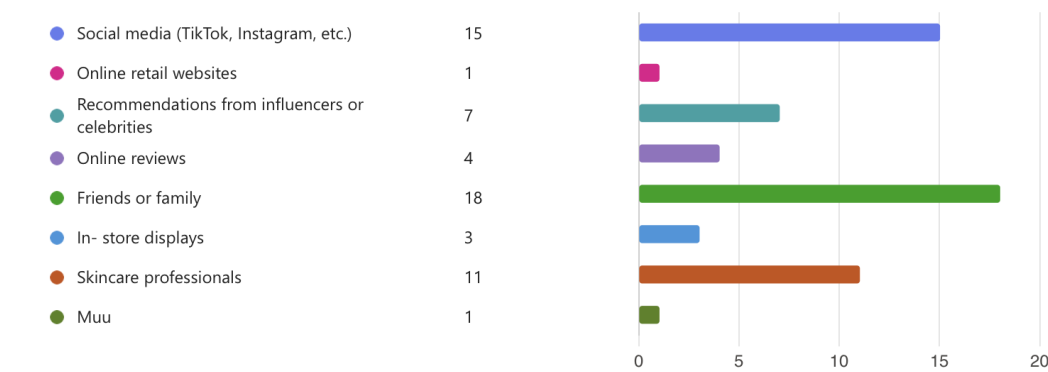


Figure 9: Platforms and sources influencing the purchasing decision of skincare products containing a specific ingredient

Interpretation

Yip (2024) discovered that the most googled ingredient in Australia (2021) was hyaluronic acid and retinol was placed fifth, suggesting that the population of Australia is aiming more to promote skin health and using ingredients that protect their skin barrier. The results of the respondent point that hyaluronic acid was the most used ingredient among the informants. The most looked for results from skincare were hydration, following with soothing and redness minimizing benefits, correlating with the previously mentioned study.

Many of the informants agreed to check the ingredient lists of products for not having any added colors, perfumes or alcohol, indicating the want for more clean beauty. This result correlates with Shim, Woo & Park's (2024) study, where it is revealed that clean beauty strongly affected the participants' selection of cosmetic products. Kumari & Khurana (2013) found that the demand for natural cosmetics and personal care products has risen, which can also be seen in the results of the respondent as natural oils were used by the informants.

According to Valenti (2024), the use of retinol can be started in the 20s to 30s in order to prevent fine lines and other signs of aging. This can be seen in the results of the respondent as retinol was ranked as the third used active ingredient among the informants who belong to the generation Z. 13% of the informants chose anti-aging benefits as the result they look for from skincare products.

6.4 Conclusion

In summary, the most used active ingredient among the generation Z informants was hyaluronic acid, following with vitamin C and retinol (vitamin A). The additional ingredients used by the informants included natural oils such as jojoba oil, tea tree oil and rosemary

oil. The most looked for result from skincare products was hydration. Soothing and redness minimizing benefits were found to be the second looked for results of skincare products.

7 Critical review

In this chapter, the respondent will perform a critical review of the thesis in order to critically examine the positive and negative aspects of the thesis.

The respondent feels that the aim of the thesis was presented clearly and the questions were answered through the survey.

The theoretical framework of the thesis is valid to the topic and covers most of the active ingredients found in the survey as well. Theoretical framework is divided clearly into sections, making it easy to read. The respondent thinks that an overview of the active ingredients could have been a good addition to the theoretical framework, so it could have given the readers a summary, making the information more easy to understand.

In the chapter previous research, all of the studies were linked to the topic, however it was difficult to find previous research that included active ingredients and the trends among them. The respondent feels that there could have been fewer previous research about consumer behavior regarding cosmetics.

The survey was sent to informants through a text message and all of the informants belonged to the respondent's close circle. Not all of the informants were educated on the topic of the thesis and for some, the terminology used in the survey was not familiar even though all of the informant's used skincare. It could have been better to select the informants based on their knowledge of skincare ingredients, in order to gain more accurate results. The respondent feels that the results of the survey were presented clearly and with the help of figures, it was easy to understand. The respondent also thinks that the aim of the study can be answered with the results of the study.

Finding information of the chosen topic was easy, but the respondent feels that many of the sources leaned towards cosmetic science and medical literature rather than typical cosmetic and skincare books. The respondent worried that some of the words and topics included in the thesis would be difficult to understand for the readers.

8 Discussion

My daily consumption of cosmetic content such as trends, reviews and guides and my personal interest towards skincare and its ingredients led me wanting to explore this topic for my thesis. This thesis was educational for me and also a way to deepen my existing knowledge of the topic.

It can be difficult to find the suitable skincare products and ingredients, and there are a lot of information on many different platforms. Anyone can provide cosmetic content and speak on different products creating trends, but not all of the information is reliable.

Different active ingredients were covered on this thesis, along with their origins, uses and effects on the skin. For the readers that may only have a limited knowledge of these ingredients, can this thesis be helpful and educational.

The survey was very eye-opening for me, since working on my thesis I mostly focused on finding out what are the active ingredients trends and the most used ingredients among consumers. Once reviewing the answers, I came to a realization that the trends are not one of the only factors influencing the consumers' purchasing of cosmetics. Many individuals are not able to participate to the trends as their own skin concerns and skin disorders affect the product's they can use, even if they wish to follow the trends.

If I had to do something differently with my thesis, I would have also studied the correlation between the most used active ingredients and the results looked with them. This would have given valuable data on are the consumers using the right active ingredients to achieve the wanted results. The purpose of this would have been to educate consumers on the right active ingredients for them and their needs.

For the next Bachelor of Beauty and Cosmetics student writing a thesis within this same topic, I would suggest exploring how younger age groups such as teenagers use active ingredients and how are skincare trends impacting them.

References

Barton, S. (Eds.) (2020). Discovering cosmetic science. Retrieved from https://ereader.perlego.com/1/book/1841403/15?element_originalid=ST365

Brannon, H. (2024, September 10). Beta hydroxy acid for aging skin and wrinkles. (Blog post). Retrieved 2025, March 7 from <https://www.verywellhealth.com/beta-hydroxy-acid-1068888>

Choi, Y., Kim, S. & Lee, K. (2022). Changes in consumers' awareness and interest in cosmetic products during the pandemic. *Fash text*, 9(1). doi: <https://doi.org/10.1186/s40691-021-00271-8>

Coelho, S., Kornhauser, A. & Hearing, V. (2010). Applications of hydroxy acids: classification, mechanisms and photoactivity. *Clin cosmet investig dermatol*, 3, 135-142. doi: 10.2147/CCID.S9042

Coghlan, D., & Brydon-Miller, M. (2014). Quantitative and qualitative research. *The SAGE encyclopedia of action research*, 1(2), doi: 10.4135/9781446294406

Content analysis. (2025). Columbia mailman school of public health. Retrieved from <https://www.publichealth.columbia.edu/research/population-health-methods/content-analysis>

Danjuma, Z. (2024, July 31). What is hyaluronic acid and why do I need it? All your skincare questions answered (Blog post). Retrieved 2025, March 4 from <https://www.evolvebeauty.com/en-eu/blogs/news/what-is-hyaluronic-acid-and-why-do-i-need-it-all-your-skincare-questions-answered?srsId=AfmBOor958iBoGoyi3GGiuSQL1eeZbRjQBwvCYI3GAzKWx3-Dk5J2p1#1>

Dreher, F., Jungman, E., Sakamoto, K., & Maibach, H. (2023). *Handbook of cosmetic science and technology*, fifth edition. Retrieved from <https://ereader.perlego.com/1/book/4364462/0>

Farris, P. (Ed.) (2013). *Cosmeceuticals and cosmetic practice*. Retrieved from <https://ereader.perlego.com/1/book/997258/16>

Fisher, S. (2023, April 1). How to write great survey questions (with examples). (Blog post). Retrieved 2025, March 17 from <https://www.qualtrics.com/blog/writing-survey-questions/>

Hasan, S., & Maniar, A. (2022). Product attributes and user perception determining purchasing behavior for skincare products. *Propel journal of applied management*, 2(2). Retrieved from <https://www.pjam.propelmas.com/index.php/pjam/article/view/21/27>

Harwood, T., & Garry, T. (2003). An overview of content analysis. *The marketing review*, 3(4), 479-498. Doi: <https://doi.org/10.1362/146934703771910080>

Hirons, C. (2021). *Skincare*. Retrieved from <https://ereader.perlego.com/1/book/3026837/19>

Kamwendo, A., & Maharaj, M. (2022). The preferences of consumers when selecting skin care products. *Journal of contemporary management*, 19(1), 82-106. doi: <https://doi.org/10.35683/jcm20134.138>

Kassouf, A. (2022, February 24). Vitamin E for skin: What does it do? (Blog post). Retrieved 2024, April 10 from <https://health.clevelandclinic.org/vitamin-e-for-skin-health>

- Keen, MA., & Hassan, I. (2016). Vitamin E in dermatology. National library of medicine, 7(4), 311-315. doi: 10.4103/2229-5178.185494
- Kornhauser, A., Coelho, S. & Hearing, V. (2010). Applications of hydroxy acids: classification, mechanisms and photoactivity. Clin cosmet investig dermatol, 3, 135-142. doi: 10.2147/CCID.S9042
- Kumari, S., & Khurana, P. (2013). Cosmeceuticals: current trends and market preparations. IOSR Journal of pharmacy and biological sciences, 8(3), 45-48.
- Lee, J., Goh, M. & Noor, M. (2019). Understanding purchase intention of university students towards skin care products. PSU research review, 3(3), 161-178. doi: <https://doi.org/10.1108/PRR-11-2018-0031>
- Liu, K., & Nassim, J. (2020, January 23). The hype on hyaluronic acid (Blog post). Retrieved 2025, March 4 from <https://www.health.harvard.edu/blog/the-hype-on-hyaluronic-acid-2020012318653>
- Luo, A. (2023). Content analysis – Guide, methods & examples. Scribbr. Retrieved 9.3.2025 from <https://www.scribbr.com/methodology/content-analysis/>
- McCombes, S. (2019). Survey research – definition, examples & methods. Scribbr. Retrieved 17.3.2025 from <https://www.scribbr.com/methodology/survey-research/>
- Miller, A. (October 30, 2024). How gen Z reshapes social media use. Digital marketing news. Retrieved from <https://dmnews.com/how-gen-z-reshapes-social-media-use/>
- Moghimpour, E. (2012). Hydroxy acids, the most widely used anti-aging agents. Pubmed Central, 7 (1), 9-10.
- Neo, B. (2024). 8 types of data analysis. BuiltIn. Retrieved 25.3.2025 from <https://builtin.com/data-science/types-of-data-analysis>
- Rodan, K., Fields, K., Majewski, G., & Falla, T. (2016). Skincare bootcamp: The evolving role of skincare. Plast Reconstr Surg Glob Open, 4(12), e1152.
- Sawers, K. (2024, January 26). From fine lines to flawless complexion: How hyaluronic acid transforms skin health. (Blog post). Retrieved 2025, March 9 from <https://collectiveskincare.com/blog/hyaluronic-acid/>
- Sissons, B. (2021, April 20). What are the benefits of alpha hydroxy acid (AHA)? (Blog post). Retrieved 2025, March 9 from <https://www.medicalnewstoday.com/articles/alpha-hydroxy-acid>
- Slepian, R., & Furman, H. (2023). Comprehensive precision medicine (first edition). TX: Elsevier inc.
- Shim, J., Woo, J. & Park, S. (2024). The clean beauty trend among millennial and generation Z consumers: assessing the safety, ethicality, and sustainability attributes of cosmetic products. SAGE open, 14(2). doi: <https://doi.org/10.1177/21582440241255430>

Silva, S., Ferreira, M., Oliveira, A.S., Magalhães, C., Sousa, M.E., Pinto, M., Sousa Lobo, J.M. & Almeida, I.F. (2019). Evolution of the use of antioxidants in anti-ageing cosmetics. *International journal of cosmetic science*, 41(4), 378-386.

Shorten, A., & Smith, J. (2017). Mixed methods research: expanding the evidence base. *Evid based nurs*, 20(3), 74-75. doi: 10.1136/eb-2017-102699

Somerville, K. (2020, January 24). What are active ingredients in skincare? (Blog post). Retrieved 2024, April 11 from <https://www.katesomerville.com/blogs/news/what-are-active-ingredients-in-skincare>

Somerville, K. (2022, February 28.) Does niacinamide help with acne? (Blog post). Retrieved 2024, November 4 from <https://www.katesomerville.com/blogs/news/does-niacinamide-help-with-acne>

Somerville, K. (2024, January 29). Ingredient spotlight: Peptides for skin. (Blog post). Retrieved 2024, April 11 from <https://www.katesomerville.com/blogs/news/ingredient-spotlight-peptides-for-skin>

Tenny, S., Brannan, J., & Brannan, G. (2022). Qualitative study. Treasure island (FL): StatPearls publishing.

Valenti, L., & Noble, A. (2024, January 2). 9 essential things to know before using retinol and retinoids. (Blog post). Retrieved 2025, March 9 from <https://www.vogue.com/article/retinol-retinoids-guide-fine-lines-sun-damage-healthy-glow>

Writing survey questions. (2025). Washington: Pew research center.

Yip, L. (2024). Anti-aging trends in Australia. *Journal of the European academy of dermatology & venereology*, 38(4), 45-52. doi: <https://doi.org/10.1111/jdv.19647>

Figure 1: Scanning electron microscope images showing the difference between dry and moisturized skin surfaces. (Barton, 2020)	11
Figure 2: Visible skin changes with increasing age. (Barton,2020)	12
Figure 3: The use of skincare	20
Figure 4: The results looked from skincare products	21
Figure 5: Checking of the ingredient list	21
Figure 6: Most used active ingredients.....	22
Figure 7: The influence of skincare trends on the purchasing decision	23
Figure 8: Platforms and sources influencing the purchasing decision of skincare	24

Figure 9: Platforms and sources influencing the purchasing decision of skincare products containing a specific ingredient24

Appendix 1

Active ingredient trends

Hello! Thank you for participating in this survey for my thesis for the Bachelor of Beauty and Cosmetics degree program. The aim of this study is to gain knowledge of the current skincare trends among generation Z consumers and also to get insight on what are the results looked for with the use of them. The answers will be completely anonymous and it won't take longer than 10 minutes to complete. Thank you for participating!

1. Are you a member of generation Z? (Born between 1997 and 2012)
 - Yes
 - No

2. What is your gender?
 - Woman
 - Man
 - Other

3. How often do you use skincare products?
 - Daily
 - 2-3 times a week
 - Once a week
 - Couple times a month

4. When purchasing a skincare product, do you check the list of ingredients?
 - Yes
 - Yes, but I only look for specific ones
 - No

5. If you answered "Yes, but I only look for specific ones", please specify which ingredients do you look for?

6. Rank what are your most used active ingredients (1- is the most used 9- least used)
 - Retinol (vitamin A)

- Hyaluronic acid
 - Vitamin C
 - Vitamin E
 - Peptides
 - Ceramides
 - Niacinamide
 - AHA, BHA or PHA (exfoliating acids)
 - Other
7. If you selected “other” in question 6 as an ingredient you use, what are the additional ingredient(s) you use?
8. What are the results that you seek from your skincare products?
- Hydration
 - Anti-aging benefits
 - Reduction of pores and oil-control
 - Soothing and redness minimizing benefits
 - Reduction of hyperpigmentation
 - Other?
9. Which of these following platforms or sources have influenced your decision to purchase skincare products?
- Social media (TikTok, Instagram, etc.)
 - Online retail websites
 - Recommendations from influencers or celebrities
 - Online reviews
 - Friends or family
 - In-store displays
 - Skincare professionals
 - Other
10. Which of these following platforms or sources have influenced your decision to purchase skincare products containing a specific ingredient?
- Social media (TikTok, Instagram, etc.)
 - Online retail websites
 - Recommendations from influencers or celebrities
 - Online reviews
 - Friends or family
 - In-store displays
 - Skincare professionals
 - Other
11. Do skincare trends affect your purchasing decision?
- Yes
 - No
 - Somewhat
12. Motivate your response on “Do skincare trends affect your purchasing decision?”