# **Analysis Paralysis**



**Research Firm** 

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## **Executive Summary**

Analysis Paralysis (Research Firm) conducted an exploratory research study using a questionnaire to identify the top three preferred hair, skin, and nail supplement brands for American women, ages of 25- 30 (participants), living in the New York City metropolitan area. This study was conducted to determine the factors that influence popularity in brands for hair, skin, and nail supplements, amongst the study participants (Problem). The Research Firm drafted a 20 questions survey (Questionnaire) that is designed to identify the top three preferred hair, skin, and nail supplement brands to participants. Objectives of this exploratory research include:

1) Identify product attributes that most likely impact favorability of the brand among target population, 2) Identify other factors that influence consumer behavior in choosing hair, skin, and nail supplement brands. Based on our findings, the top three preferred hair, skin, and nail supplement brands were Nutrafol, Olly, and Nature's Bounty. The Research Firm obtained the total of 50 completed surveys (Population) which inform our discussion below.

The demand for hair, skin and nail vitamins has exploded ever since celebrity endorsements, influencers and social media marketing has become the new way to sell products. With that being said though, a lack of standardized dosing and regulation in beauty supplements have become a big issue in the industry. Finding the right product that meets all the right criteria and generates real results, can be tough. It's important to understand which vitamins are linked to specific hair, skin and nail benefits. Some vitamins may only aid in or improve benefits, but it's most significant to look for the right vitamins in the supplements you do decide to invest your money and time in.

With that being said, according to Analysis Paralysis's research, the top three companies that American women ages 25-30, purchasing hair, skin and nail supplements are, the fast rising companies known as Nutrafol, Olly and Nature's Bounty. As there are many hair growth

products on the market, it can take some time and investment to know which one generates real results. According to our exploratory research, results show that Nature's Bounty is the most preferred and purchased hair, skin and nail supplement amongst the participants. Nature's Bounty says that their hair, skin and nail supplements provide you with the vital nutrients your body needs to support your natural beauty from within. The key ingredients that make up this top selling product are Vitamin A, B, C, E and biotin. With vitamin B helping with energy metabolism, vitamins E and C working as antioxidants as well as assisting with collagen production, vitamin A aiding in skin maintenance and biotin which maintains overall healthy hair and nails, it's no wonder why Natures Bounty is taking the lead in today's beauty and wellness supplement market. Not to mention, only costing \$12- \$15 a bottle, Nature's Bounty seems to be a pretty amazing deal for being one of the most sought out hair, skin and nail supplements being sold today.

Second off but tying with Olly, Nutrafol has been clinically studied and proven to improve hair regrowth by eighty percent within three months, and is one of the fastest growing supplements for healthy hair and hair growth on the market right now. The product contains one hundred percent natural ingredients where Sensoril ashwagandha, tocotrienol complex and marine collagen play the biggest roles in this next top selling product. These key ingredients claim to rebalance stress hormones that can cause hair loss, combat the inflammation that interrupts hair growth, and fight free radical damage. Although Nutrafol is one of the top hair, skin and nail products on the market right now, it is the priciest of the three leading brands we conducted research on.

Lastly but being the most affordable- and is chewable, Olly Undeniable Beauty hair, skin and nail supplements come in a gummy form and cost a fraction of the price Nutrafol amounts to. These hair, skin and nail gummies claim to be

packed with the perfect blend of active ingredients to help keep your hair in tip- top shape, by supporting the body's natural production of keratin, which contributes to hair, skin and nail growth, from within. The key ingredients in these ruby red grapefruit flavored gummies are biotin, vitamin C and keratin. Vitamin C is necessary to build collagen, an important protein that is essential for healthy hair as it has antioxidant properties that protect your hair from free radicals which lead to breakage and dull hair color while biotin stimulates keratin production.

Although all the supplements we researched and conducted surveys on, seem to have some similar properties to them, supplements containing vitamins B, C, E and biotin seem to be constant in most supplements. Healthy hair and healthy hair growth has a lot to do with genetics but consuming the right vitamins to help maintain and aid healthy hair growth is what is essential for real results. Some other factors that played in the overall purchase in hair, skin and nail supplements were, price, taste and popularity. As you continue to look through our research, you will see how we conducted and concluded our results.

## \* Research Project Team

## **Janet Gili: Project Director**

My name is Janet Gili and this is my third year of college. I am currently in the Business and Fashion Technology Bachelor's program at City Tech and hope to be graduating by Fall 2023. I am in the process of starting my own online retail boutique and strive to be a buyer one day. I am the team's project director and am responsible for the overall completion of the research project.

## **Karina Islas: Research Analyst**

Hi my name is Karina Islas. This is my first year at City Tech college. I graduated from Kingsborough in August 2022. I am majoring in Business & Technology of Fashion and I am the team's research analyst. I chose this major, because I like fashion and I want to be able to learn more about our fashion industry. I think that this class will help me learn about marketing, and how it can also relate to fashion.

## **Mehreen Khanom: Statistical Writer**

My name is Mehreen Khanom. I am majoring in a Business and Technology of fashion degree. Currently this is my third year and I am a member of this group's statistical writers. My responsibility consists of writing/editing the various components of the research project. My goal for this project is to work together with my team and create a well-organized plan to finish the research project on time.

## **Problem Discovery and Definition**

## A. Exploratory Research:

## Secondary Data Research Search

Hair supplements are an increasingly popular way to promote healthy hair growth. With so many different supplements on the market, it can be difficult to know which ones are the most effective. To help, we conducted a secondary data research on the top three hair supplements used.

The first supplement is biotin, a B-vitamin that is known for its ability to promote hair growth and improve hair texture. Biotin is found in many foods, such as eggs, nuts, and some fish. It can also be taken in supplement form. Studies have shown that biotin supplementation can lead to significantly increased hair growth and a decrease in hair shedding.

The second supplement is collagen. Collagen is a protein that makes up a large part of the skin, hair, nails, and other connective tissues. It is found in many foods, but can also be taken as a supplement. Studies have found that taking a collagen supplement can lead to improved hair growth, increased hair strength, and reduced hair shedding. Finally, the third supplement is folic acid. Folic acid is an essential B-vitamin that helps the body produce new cells. It is found in many foods, and can also be taken as a supplement.

Vitamin C and third supplement is an essential nutrient that provides numerous health benefits, including improved hair, skin, and nail growth. Vitamin C helps to protect the skin from free radicals and UV radiation damage, as well as helping to promote

cell regeneration and collagen production, leading to healthier and more vibrant skin. Vitamin C also helps to protect the scalp and hair from damage, promoting healthy hair growth and preventing hair loss. Additionally, vitamin C helps to promote healthy nail growth, strengthening the nails and reducing the risk of breakage.

For hair growth, vitamin C helps to improve circulation in the scalp, which helps to stimulate hair follicles and promote hair growth. Vitamin C also helps to reduce inflammation in the scalp, which can lead to healthier hair growth. Additionally, vitamin C helps to strengthen the hair shaft, making it more resistant to damage and breakage.

For skin health, vitamin C helps to reduce the occurrence of wrinkles and other signs of aging. Vitamin C helps to promote the production of collagen, which helps to reduce the appearance of fine lines and wrinkles. Additionally, vitamin C helps to protect the skin from UV radiation damage, reducing the risk of sunburn and skin cancer. For nail growth, vitamin C helps to prevent the nails from becoming brittle and weak.

Lastly, vitamin E is an essential nutrient for healthy hair, skin, and nail growth. It is a powerful antioxidant that helps protect cells from damage caused by free radicals. Free radicals are unstable molecules that can damage cells, leading to premature aging, wrinkles, and other signs of aging. Vitamin E also helps to reduce inflammation, which can lead to dryness and irritation of the skin.

Vitamin E helps to support healthy hair growth by helping to nourish the scalp. It helps to keep the scalp hydrated, which can help to reduce dandruff, itching, and dryness. Vitamin E also helps to improve blood circulation to the scalp, which can help to promote healthy hair growth.

Vitamin E helps to promote healthy skin by helping to protect it from environmental stressors, such as sun damage, pollution, and other environmental toxins. Vitamin E helps to protect the skin from free radical damage, which can lead to premature aging and wrinkles. Vitamin E also helps to reduce inflammation and keep skin hydrated, which can help to reduce acne and other skin issues. Vitamin E helps to support healthy nail growth by helping to nourish the nail beds. Vitamin E helps to keep nails strong and healthy by helping to improve circulation to the nail beds

## **Experience Survey**

Since the goal of our research is to understand and identify, which hair, skin and nail supplement is the most preferred and sold on the market today, Analysis Paralysis chose to conduct an experience survey on an individual, who falls within the participants criteria. This participant's name is Dory Lu and she has had experience using all three brands that we conducted research on which were Nutrafol, Olly, and Nature's Bounty. Based on our research and our experience survey, it was becoming more clear as to what products resulted in being the most common. Dory talked about how she felt about each product, which one she liked the most and shared information on which product she would recommend out of the ones discussed. Our questions and her answers are down below:

## Which is the first hair, skin and nail supplement you tried?

The first product I tried was Nutrafol. I needed something for my hair to grow fast, that's why I chose to buy this product. I didn't know if this product was going to work so I kept asking my friend if she saw any difference and she said that it looked the same.

## Did you like Nutrafol and would you consider buying it again?

Yes I did like the product. Yes I would buy it again, because it did actually help my nails grow but I didn't see too much difference in my hair.

## What was the second hair, skin and nail supplement product you tried?

The second product I tried was Olly because I heard it was good for beauty and skin. It also was a lot kinder to my wallet.

## Did you like Olly and would you consider buying it again?

Yes I did like Olly and I would buy it again because it is cost efficient and felt it worked really great for skin and made my hair shiner. With that being said though, I didn't see much hair growth.

## What was the last hair, skin and nail supplement you tried?

The last supplement I tried was Nature's Bounty and I felt this was the best product for me. Not only was the product sold at a decent price but I felt the vitamins in this product gave me the results I was looking for. It's a really great product and would recommend this product to anyone who has hair loss, or for nails and skin.

## Out of all supplements, which was your favorite?

I have to say my favorite product was Nature's Bounty. I feel like it worked more than the other products that I tried as in i Saw hair growth and thickness as well as nail growth and more of a glow to my skin. On top of that, it doesn't break the bank

## **Problem Discovery and Definition**

#### **B. Problem Definition:**

## 1. Problem Statement

Despite the wide range of hair supplements available, it is difficult to determine which are the most effective and provide the best results. It is also unclear which ingredients are most beneficial for promoting hair growth and reducing hair loss. Furthermore, there is limited information available on potential side effects or potential interactions between hair supplements and other medications.

## 2. Research Objectives

- 1. Identify the top hair supplements available on the market according to consumer reviews and ratings.
- 2. Compare the cost and dosage of the top hair supplements to determine the most cost-effective option.
- 3. Examine the ingredient composition of the top hair supplements to determine which ingredients are most beneficial for promoting hair growth and reducing hair loss.

#### 3. Research Questions

- 1. What are the most effective hair, skin and nail supplements for encouraging hair and nail growth?
- 2. What ingredients are commonly found in hair supplements?

3. What are the best hair supplements on the market?

## 4. Hypotheses

- 1. The top hair supplements used will be those that contain a combination of vitamins and minerals that are known to promote healthy hair growth, such as biotin, Vitamin C, and zinc.
- 2. There is a positive correlation between the number of hours a customer spends using a product and their overall satisfaction with the product.
  - 5. Questionnaire Construction (20 to 30 questions required for questionnaire)

## **Questionnaire** (6-8 pages)

## The Search of the Current Effective Vitamin

The marketing research team of students from New York City College of Technology conducts an important citywide survey among women ages 25 -30 who take supplements for their hair, skin, and nails. The following research will focus on the factors you consider in choosing the brand of your choice. Your responses will remain private and are crucial to our survey. To the best of your abilities, please provide an honest response to the following questions.

We appreciate your time and contribution to this study.

1.	What is the gender you identify as?
	☐ Female
	☐ Male
2.	What is your age?
	☐ Under 25
	□ 25-30
	□ Over 30
3.	How important is a daily intake of hair, skin, and nail supplements to you?
	☐ Very Important

	-
-	_
-	
-	-

	☐ Slightly important
	☐ Unimportant
4.	Do you take hair, skin, and nail supplements?
	□ Yes □ No



How often do you take hair, skin, and nail supplements?					
☐ Daily					
☐ Once a week					
☐ Twice a week					
☐ Once a month					
□ Never					
5. What is your favorite form of hair, skin, and nail supplements?					
☐ Capsules					
☐ Gummies					
☐ Tablets					
☐ Soft Gels					
☐ Powders					
☐ Liquids					
Others					
6. Out of the following companies/brands which one do you					
use? Select all that apply					
□ Olly					
☐ Nature's Bounty					
☐ Nutrafol					
☐ Gaia Herbs					
☐ Besha Inc					

1 2 3 4 5 6 7 8 9 10

reputation of the brand for the hair, skin, and nail supplements to you (circle one)?

10. On a scale of 1 to 10, with 10 being the most important, how important is the safety of the supplements for the hair, skin, and nail supplements to you (circle one)?

1 2 3 4 5 6 7 8 9 10

11. On a scale of 1 to 10, with 10 being the most important, how important is the country of origin of the supplements for the hair, skin, and nail supplements to you (circle one)?

1 2 3 4 5 6 7 8 9 10

12. On a scale of 1 to 10, with 10 being the most important, how important is the availability (in terms of convenience) of the supplements for the hair, skin, and nail supplements to you (circle one)?

1 2 3 4 5 6 7 8 9 10

13. On a scale of 1 to 10, with 10 being the most likely, how likely are customer reviews of the supplements for the hair, skin, and nail supplements to influence your buying decision (circle one)?

1 2 3 4 5 6 7 8 9 10

14. On a scale of 1 to 10, with 10 being the most likely, how likely is packaging and appearance of the supplements for the hair, skin, and nail supplements to influence your buying decision (circle one)?

1 2 3 4 5 6 7 8 9 10

15. On a scale of 1 to 10, with 10 being the most likely, how likely are social factors such as friends and family to influence your buying decision of the supplements for the hair, skin, and nail supplements (circle one)?

1 2 3 4 5 6 7 8 9 10

16. On a scale of 1 to 10, with 10 being the most likely, how likely is the celebrity endorsement of the brand for the hair, skin, and nail supplements to influence your buying decision (circle one)?

1 2 3 4 5 6 7 8 9 10

17. On a scale of 1 to 10, with 10 being the most likely, how likely is recommendation from a medical professional to influence your buying decision of the brand for the hair, skin, and nail supplements (circle one)?



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Celebrity endorsement													
Recommendation of the medical professional													
Social Factors (Friends and Family)													
Packaging/ Appearance													
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Availab	ility	/Coı	nven	ience	e		-						
Countr	y of	Orig	gin _										

Safety of the supplement \_\_\_\_\_

Reputation of the brand \_\_\_\_\_

Quality of the supplements					
Cost of the supplements					

## **Planning the Research Design**

## > A. Research Design

Objective: To analyze the top three hair, skin and nail supplements used by consumers.

## > B. Methodology

We will conduct surveys and an interview with consumers who are currently using hair, skin and nail supplements as well as analyze the sales data of the top three hair, skin and nail supplements and compare it with the consumer reviews to understand consumer satisfaction. We will also analyze the marketing strategies of the top three hair, skin and nail supplements.

## **Selection of Sample Design**

## > A. Sampling Technique

- 1. Survey Method: Send out a survey to a representative sample of people to determine the top three hair, skin and nail supplements used. Ask questions such as, "Which hair, skin and nail supplement do you use most often?" and "How satisfied are you with the hair, skin and nail supplement?"
- 2. Online Research: Conduct online research by searching for reviews and ratings of hair, skin and nail supplements. Analyze the data to determine

Ξ

which supplements are most popular.

- Interviews: Conduct interviews with people who use hair supplements. Ask
  them to discuss their experiences and which ones they find to be the most
  effective.
- 4. Consumer Reports: Read consumer reports about hair supplements to determine which ones are most popular.

## > B. Target Population

American women ages 25-30, living in the New York City metropolitan area.

## Collection of the Data

- ➤ A. Pre-test (collect data from only 5 people in the Target Population)
- ➤ B. Main Study (collection of the 50 completed questionnaires)

## Data Analysis

## ➤ A. <u>Editing</u>

This involved going through each response and categorizing them according to the questions asked in the survey. This allowed us to easily analyze the data and get an overall picture of what the respondents had to say about the top three hair supplements.

## **>** B. Coding

This part of the process involved taking open-ended comments and categorizing them to allow for data analysis.

## ➤ C. Analysis

This involved finding patterns and trends in the data, as well as looking for correlations between the different variables

## > D. <u>Tables and Figures</u> - (minimum of eight Tables and five Figures)

## **Conclusions and Recommendations (2-3 pages)**

The research for this project involved collecting data about the top three hair supplements used by women who are 25- 30 years of age and live in the New York City Metropolitan area. The data was collected using a survey including twenty questions, which involved asking people about which hair supplements they used, how often they used them, what effects they had on their hair, and other related questions.

The questionnaire was the major component of our study project since it allowed us to gather data on the top three vitamins for hair, skin, and nails and draw conclusions based on the responses we received. We had to take a few actions in order to conduct a successful survey for this study. The processes involve selecting the participants for the survey and deciding whether to conduct an in-person, online, or mailed survey. The survey should then be distributed, with the questions and layout designed, and the results analyzed.

The first step in the data analysis process was to edit and code the survey responses.

This involved going through each response and categorizing them according to the questions asked in the survey. This allowed us to easily analyze the data and get an overall

picture of what the respondents had to say about the top three hair supplements. Once the data was edited and coded, the next step was to analyze it. This involved finding patterns and trends in the data, as well as looking for correlations between the different variables. This allowed us to get a better understanding of what the respondents had to say about the top three hair supplements for hair, skin, and nails and how they compared to each other. The final step in the data analysis process was to interpret the results. This involved looking carefully through each response and drawing conclusions about the data.

This allowed us to make recommendations about which hair supplement was most effective and which had the most overall benefits for users. Few recommendations seek for studying each vitamin more thoroughly. Finding the benefits and drawbacks of the vitamins mentioned in the survey was also important so that we could compare the responses to data from online, social media, and promotional sources. Overall, the hypothesis was correct. The top hair supplements used did contain a combination of vitamins and minerals that are known to promote healthy hair growth, nail growth and healthy skin. The data collected did have a positive correlation. The data analysis process for this showed that Nature's Bounty was the most preferred and affordable hair, skin and nail supplement on the market today, for women who are between the ages of 25- 30 years old living in the New York City Metropolitan area.

## **EXHIBITS**



































