



Resume Project Challenge



Code - X

Challenge - Provide Insights to the Marketing Team In Food & Beverage Industry.

Presenter - Harsh Pimpalkar

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Agenda

- About
- Background
- Objectives
- Data Schema & Data Structure
- Insights
- Recommendation

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About - CodeX

CodeX is a German beverage company that is aiming to make its mark in the Indian market.



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Background

A few months ago, Codex successfully launched its energy drink in ten cities across India.

Following the product launch, the marketing team at Codex conducted a comprehensive survey across these ten cities, gathering valuable insights from a total of 10,000 respondents.

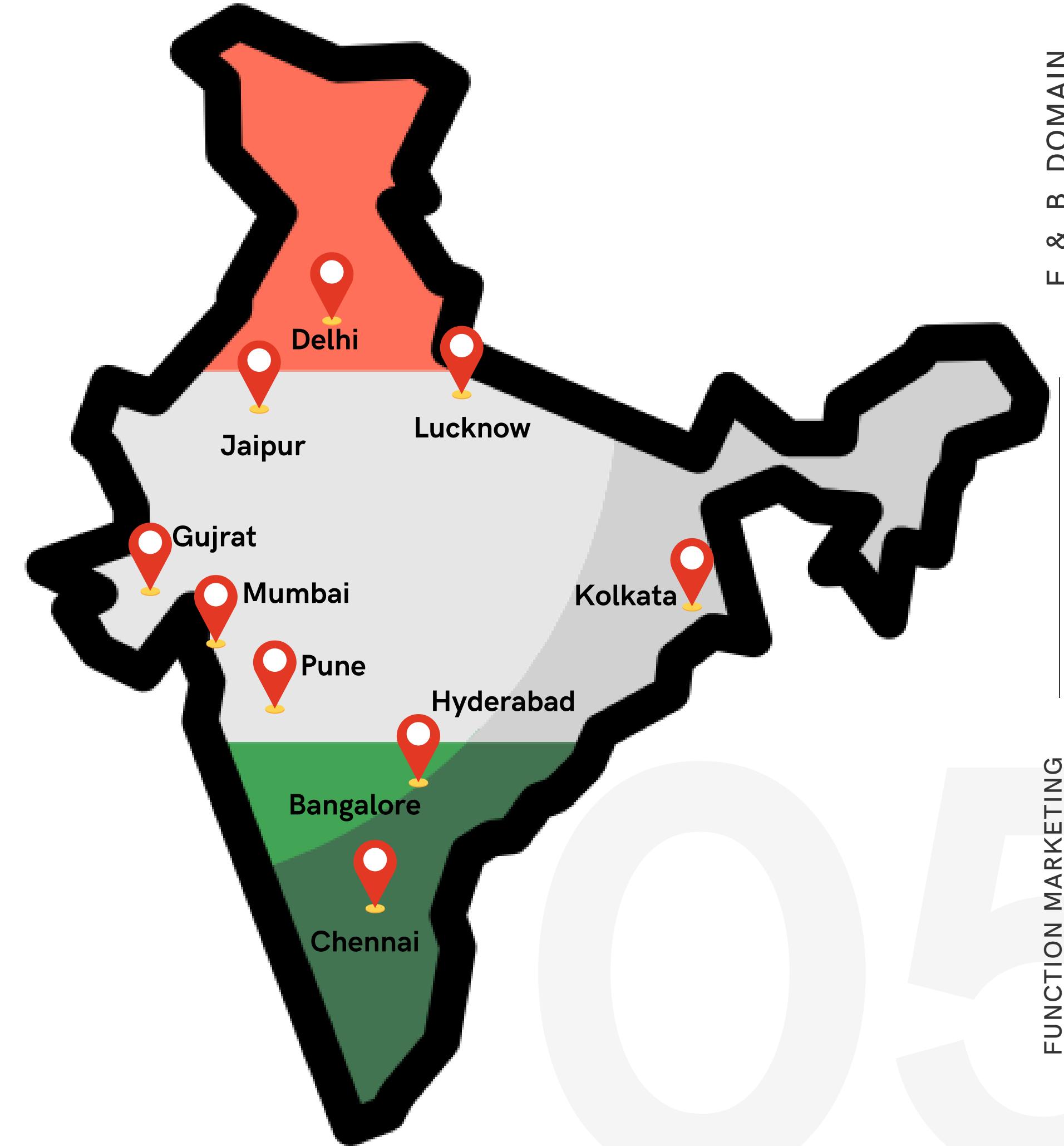
Now, the marketing team is focused on analyzing the survey responses to drive brand awareness, expand market share, and enhance product development strategies.

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10 Metro City

Where Code X Launched
their Energy Drinks



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Marketing objectives

Objective 1

How can we effectively increase brand awareness for Codex's energy drink?

Objective 2

What strategies should be implemented to expand Codex's market share?

Objective 3

How can we enhance product development for Codex's energy drink to meet consumer demands and preferences?



Provide Insights to the Marketing Team in Food & Beverage Industry

Primary Insights (Sample Sections / Questions)

Note: These insights can be derived from the survey responses

1. **Demographic Insights (examples)**
 - a. Who prefers energy drink more? (male/female/non-binary?)
 - b. Which age group prefers energy drinks more?
 - c. Which type of marketing reaches the most Youth (15-30)?
2. **Consumer Preferences:**
 - a. What are the preferred ingredients of energy drinks among respondents?
 - b. What packaging preferences do respondents have for energy drinks?
3. **Competition Analysis:**
 - a. Who are the current market leaders?
 - b. What are the primary reasons consumers prefer those brands over ours?
4. **Marketing Channels and Brand Awareness:**
 - a. Which marketing channel can be used to reach more customers?
 - b. How effective are different marketing strategies and channels in reaching our customers?
5. **Brand Penetration:**
 - a. What do people think about our brand? (overall rating)
 - b. Which cities do we need to focus more on?
6. **Purchase Behavior:**
 - a. Where do respondents prefer to purchase energy drinks?
 - b. What are the typical consumption situations for energy drinks among respondents?
 - c. What factors influence respondents' purchase decisions, such as price range and limited edition packaging?
7. **Product Development**
 - a. Which area of business should we focus more on our product development? (Branding/taste/availability)

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Insights

Secondary Insights (Sample Sections / Questions)

Note: You need to do additional market research

Recommendations for CodeX:

Give 5 recommendations for CodeX (below are some samples)

- What immediate improvements can we bring to the product?
- What should be the ideal price of our product?
- What kind of marketing campaigns, offers, and discounts we can run?
- Who can be a brand ambassador, and why?
- Who should be our target audience, and why?

Tools





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Introduction to Energy Drinks



An energy drink is a beverage designed to provide a boost of energy and increased mental alertness. It typically contains ingredients such as caffeine, vitamins, and herbal supplements. Energy drinks are popular among people looking for a quick pick-me-up, whether they need to stay awake, improve performance, or increase focus. While they can provide a temporary energy boost, it's important to consume them in moderation and be aware of their potential side effects due to the high caffeine content.



9.98%

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India Energy Drinks Market

The Indian energy drink market is projected to register a CAGR of 9.98% over the next five years.

- Energy drinks are gaining massive popularity among millennials due to aggressive marketing campaigns targeting young consumers. Moreover, advertisements promote energy drinks as drinks that ignite the mind, refresh the body, and enhance performance and stamina.
- Increased urbanization, rising disposable income, and growing health consciousness among the Indian youth have increased the demand for non-carbonated drinks called energy drinks. At the same time, long and erratic working hours and the increasing occurrence of social gatherings are driving Indian consumers toward consuming energy drinks, which are primarily classified as non-alcoholic, caffeinated, and sports drinks.
- Quality is not to be compromised, so companies are pricing the products low but promising quality to gain a significant market share. Red Bull is the giant dominating this market and continues its run as the leader.

Data Structure

dim_cities

Cities Were
codex launched
energy drink

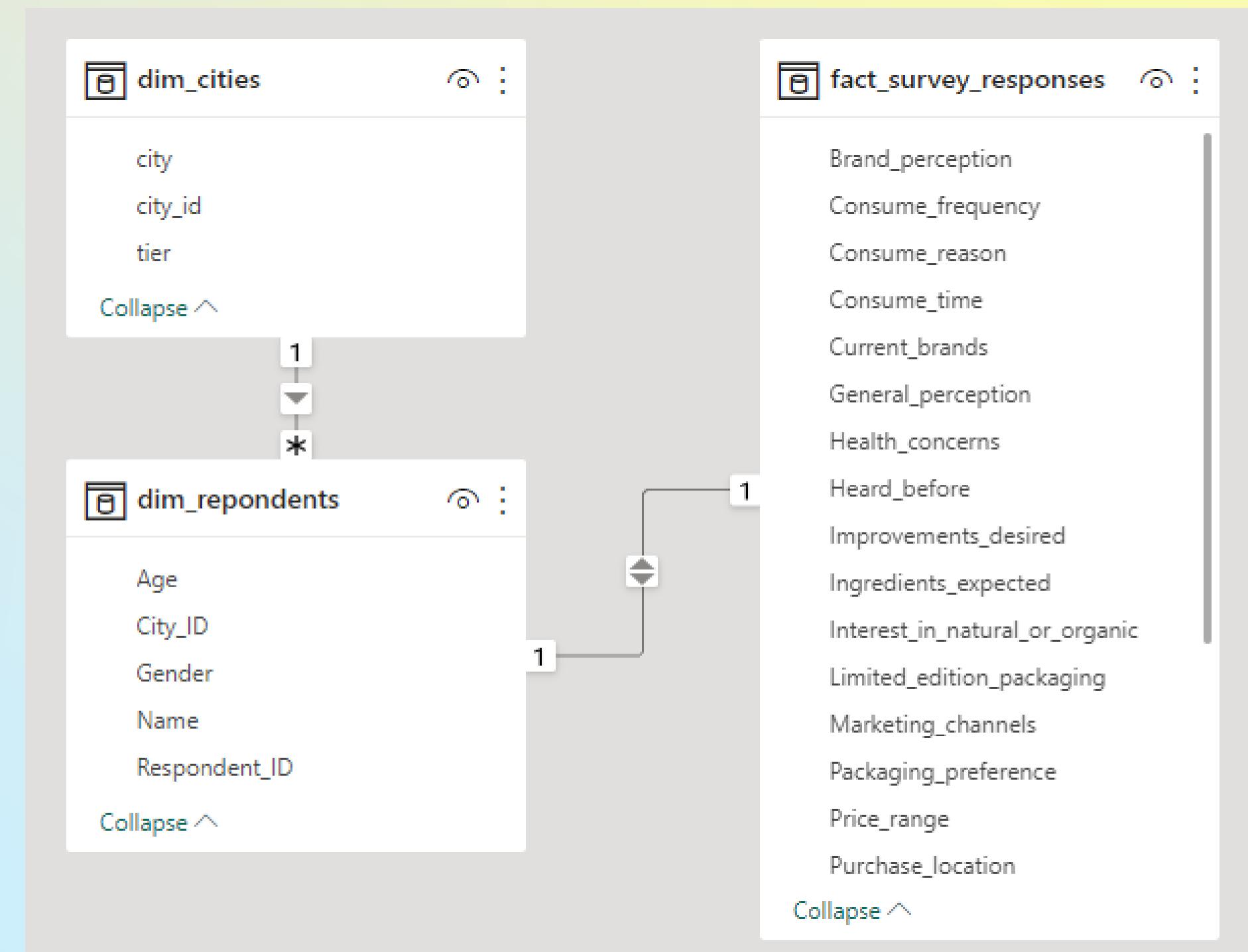
dim_respondents

Respondents
Details

fact_survey_response

Survey details

Data Schema (ERD)



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Insights

- Demographics Insights
- Consumer Preferences
- Competition Analysis
- Marketing Channels -
Brand Awareness
- Brand Penetration
- Purchase Behaviour
- Product Development



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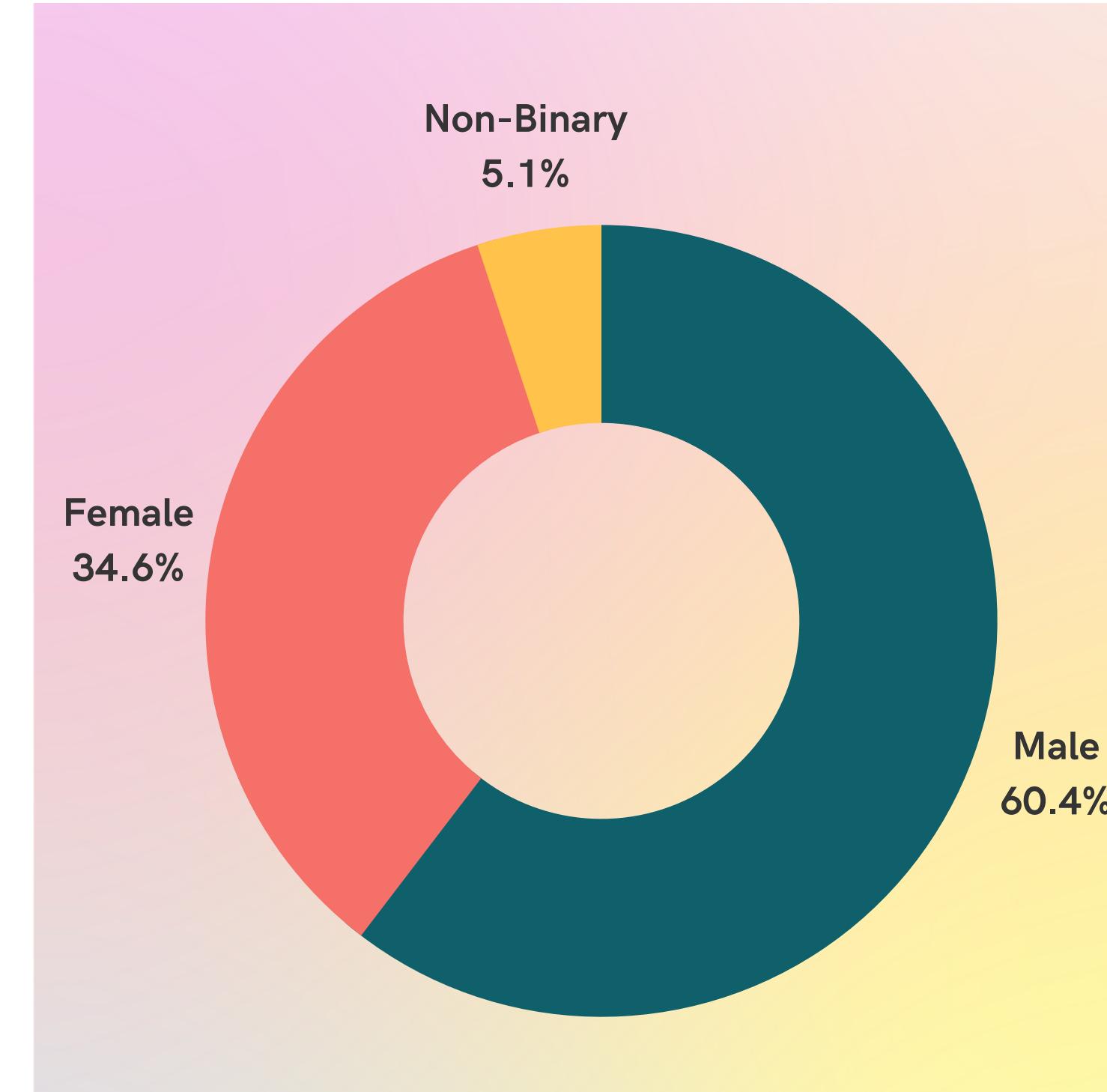
Demographic Insight

Who prefers energy drinks more? (male/female/non-binary?)

```
● ● ●  
SELECT  
    gender AS Gender,  
    COUNT((respondent_id) / 1000000) AS Total_respondents_mlns  
FROM  
    dim_repondents  
GROUP BY gender  
ORDER BY 2 DESC;
```

Gender	Total_respondents_mlns
Male	6038
Female	3455
Non-binary	507

- Energy drinks are primarily favored by the male population, constituting approximately 60% of its enthusiasts, while females and the non-binary population follow suit in their level of interest.



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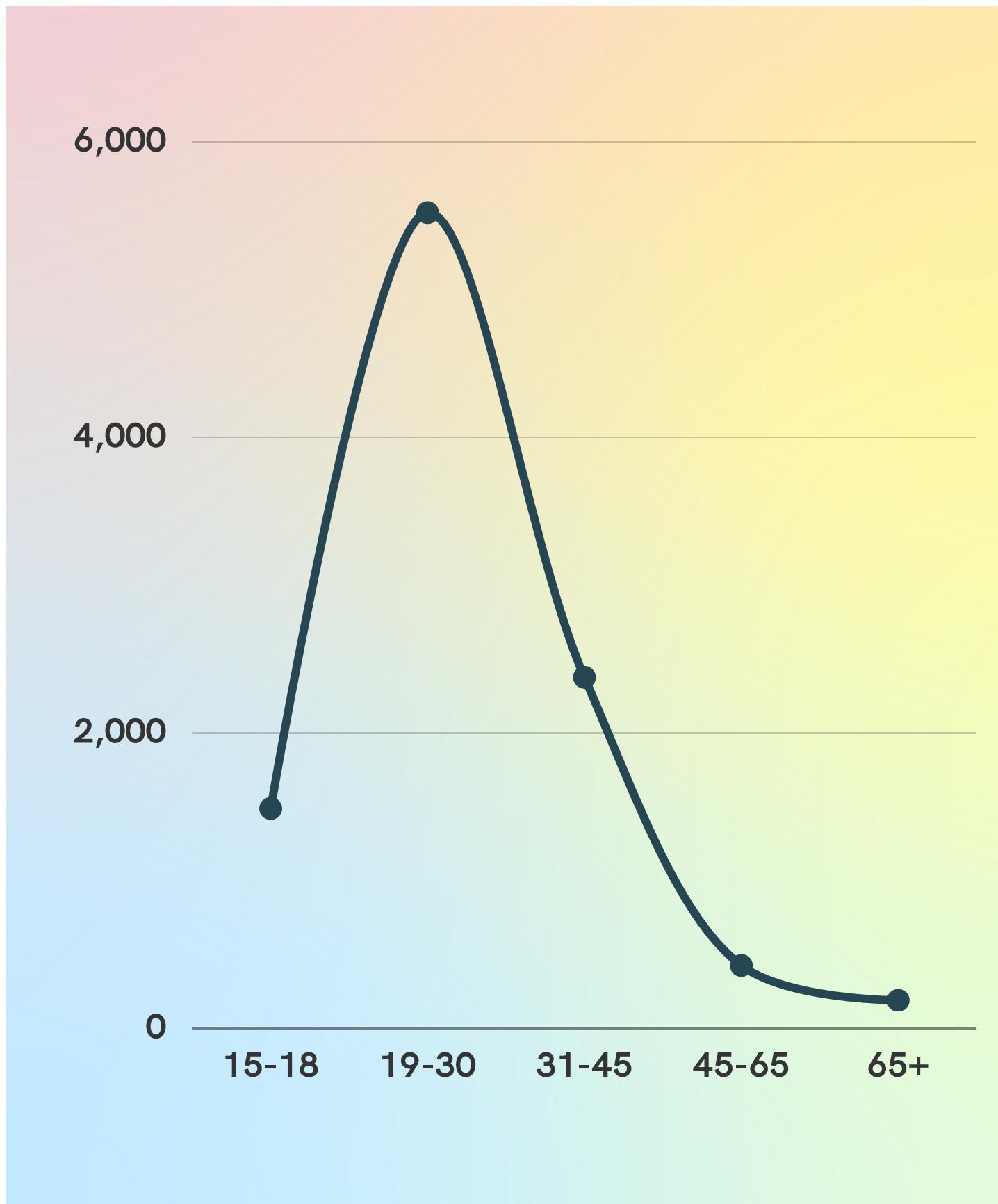
FUNCTION MARKETING

Demographic Insight

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FUNCTION MARKETING



Which age group prefers energy drinks more?



SELECT

age AS Age,

COUNT(respondent_id) / 1000000 AS Total_Respondents_mln

FROM

dim_repondents

GROUP BY age

ORDER BY 2 DESC;

Age	Total_Respondents_mln
19-30	5520
31-45	2376
15-18	1488
46-65	426
65+	190

- The age group of "19-45" exhibits the highest concentration of consumers for energy drinks, making it an essential target segment for effective marketing strategies.

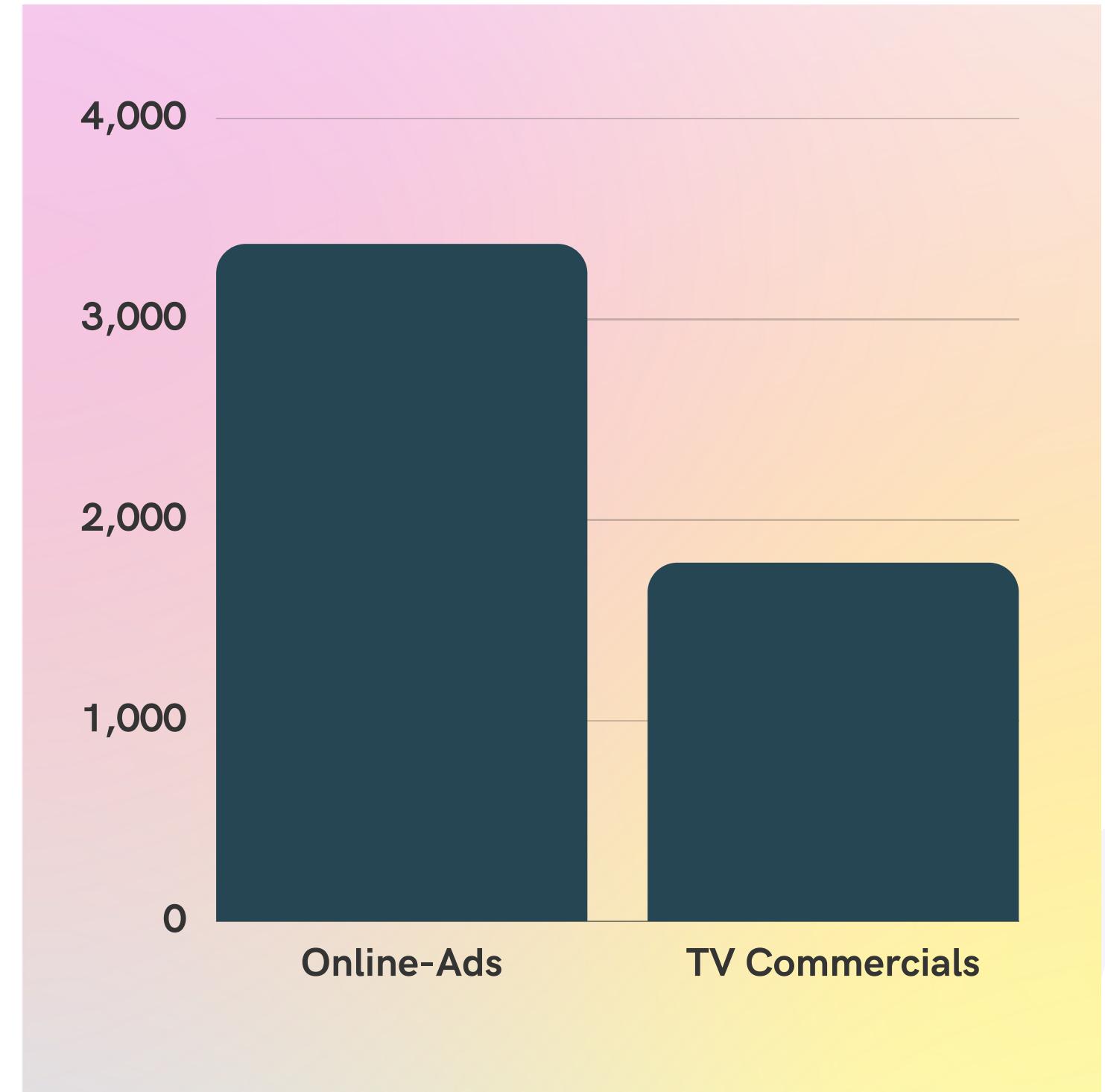


Demographic Insight

Which type of marketing reaches the most Youth (15-30)?

```
SELECT
    dr.age,
    sr.marketing_channels,
    COUNT(sr.respondent_id) AS Total_Respondents
FROM
    dim_repondents dr
        JOIN
    fact_survey_response sr ON dr.respondent_id = sr.respondent_id
WHERE dr.age IN ("15-18" , "19-30")
GROUP BY dr.age , sr.marketing_channels
ORDER BY 3 DESC;
```

age	marketing_channels	Total_Respondents
19-30	Online ads	2666
19-30	TV commercials	1290
15-18	Online ads	707
19-30	Other	608
19-30	Outdoor billboards	585
15-18	TV commercials	495

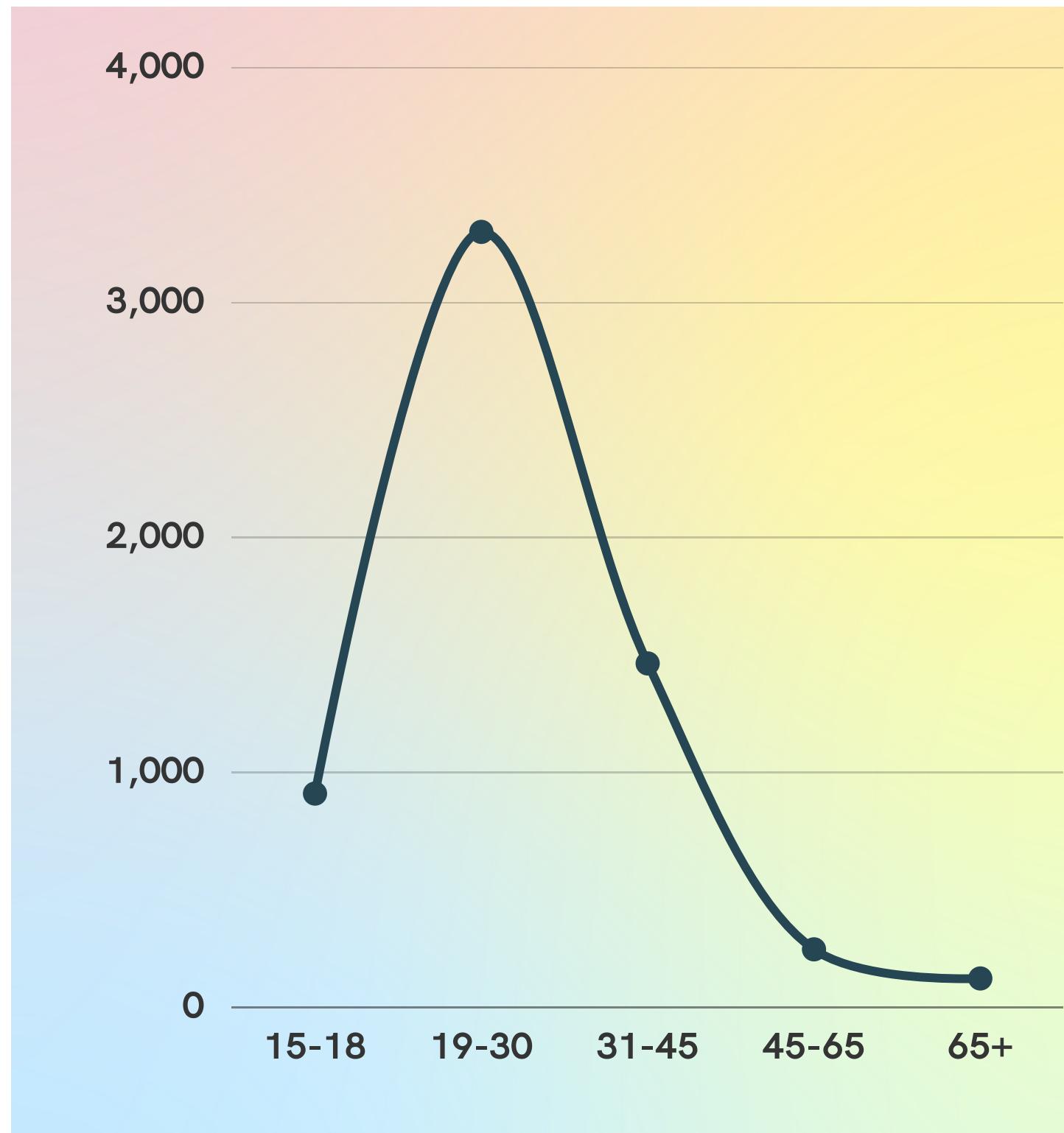


- "Online advertising and TV commercials have emerged as the most popular and highly effective channels for engaging with young customers."

Demographic Insight

Which age group is the most health-conscious when it comes to energy drinks?

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```
SELECT
    r.age AS age,
    s.health_concerns,
    COUNT(r.respondent_id) AS Total_Response
FROM
    dim_repondents r
    JOIN
        fact_survey_response s USING (respondent_id)
GROUP BY r.age , s.health_concerns
HAVING s.health_concerns = 'Yes'
ORDER BY Total_Response DESC;
```

age	health_concerns	Total_Response
19-30	Yes	3301
31-45	Yes	1464
15-18	Yes	910
45-65	Yes	247
65+	Yes	123

- "The age group of 19-30 demonstrates a greater inclination towards health concerns when it comes to energy drinks, in comparison to other age groups."

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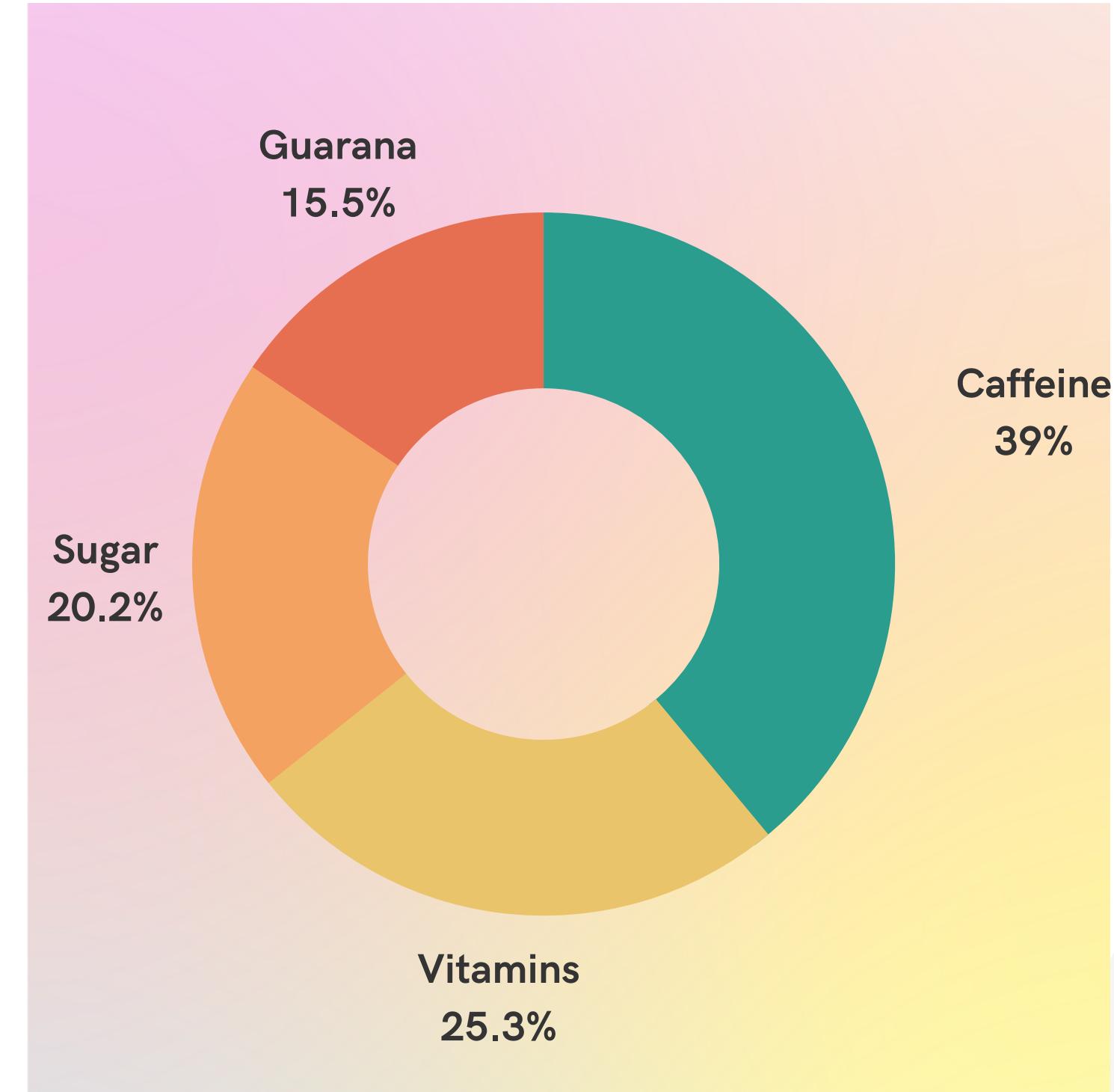
Consumer Preferences

What are the preferred ingredients of energy drinks among respondents?

```
SELECT
    ingredients_expected,
    COUNT(respondent_id) AS Total_count_respondents
FROM
    fact_survey_response
GROUP BY ingredients_expected
ORDER BY 2 DESC;
```

ingredients_expected	Total_count_respondents
Caffeine	3896
Vitamins	2534
Sugar	2017
Guarana	1553

- "Caffeine emerges as the most preferred ingredient among all genders, with vitamins, sugar, and Guarana following suit."



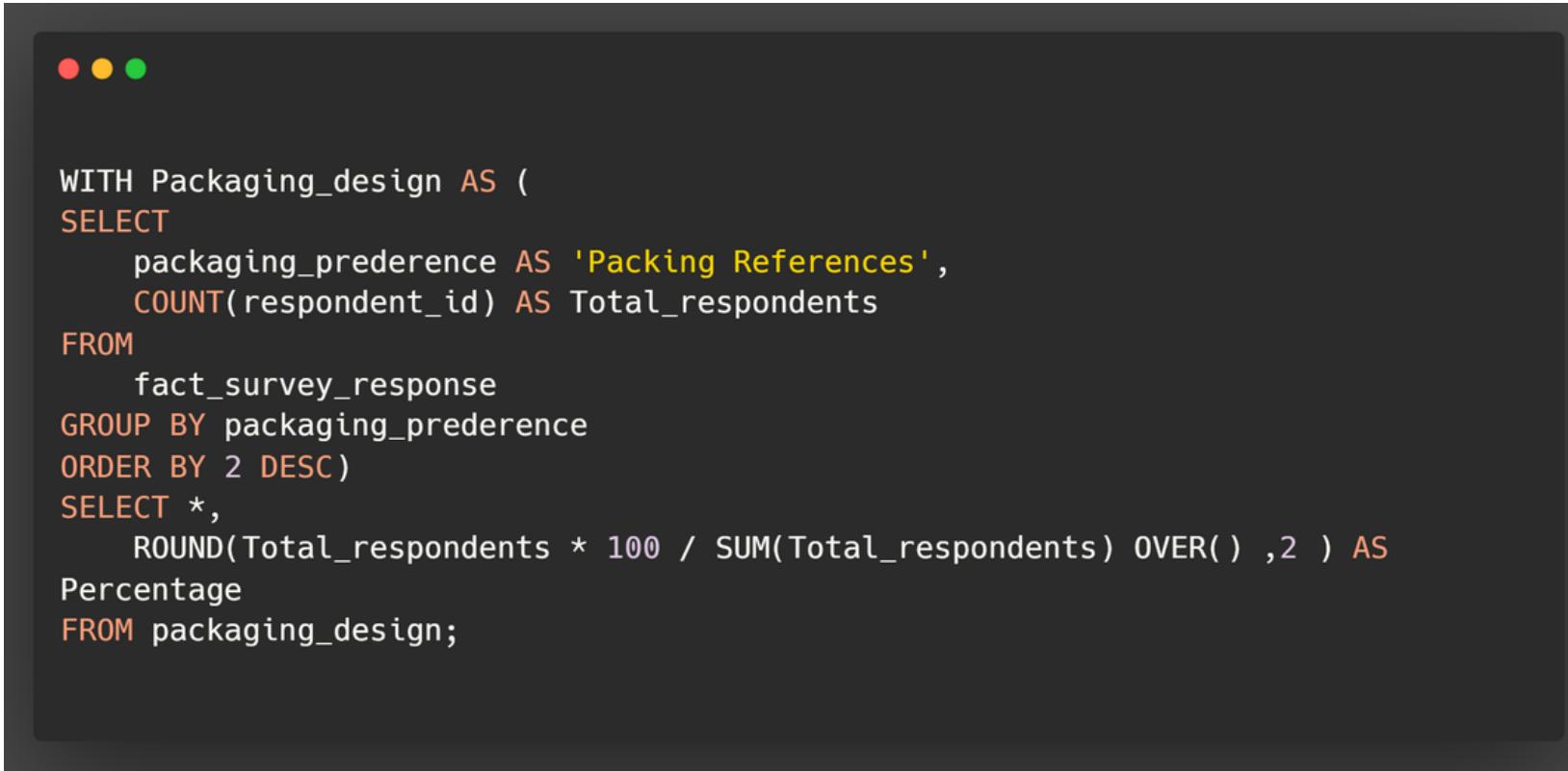
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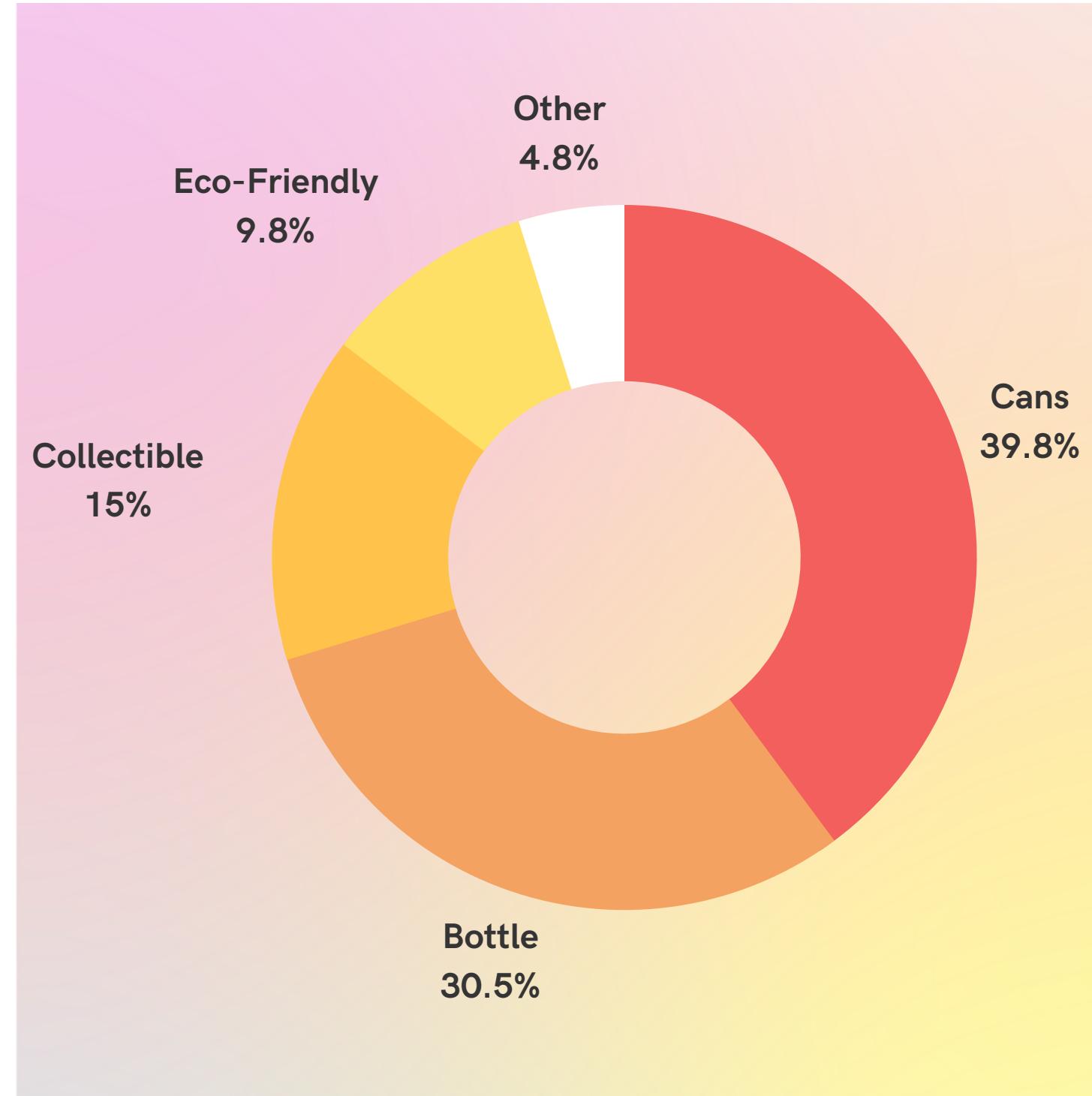


Consumer Preferences

What packaging preferences do respondents have for energy drinks?



Packing References	Total_respondents	Percentage
Compact and portable cans	3984	39.84
Innovative bottle design	3047	30.47
Collectible packaging	1501	15.01
Eco-friendly design	983	9.83
Other	485	4.85



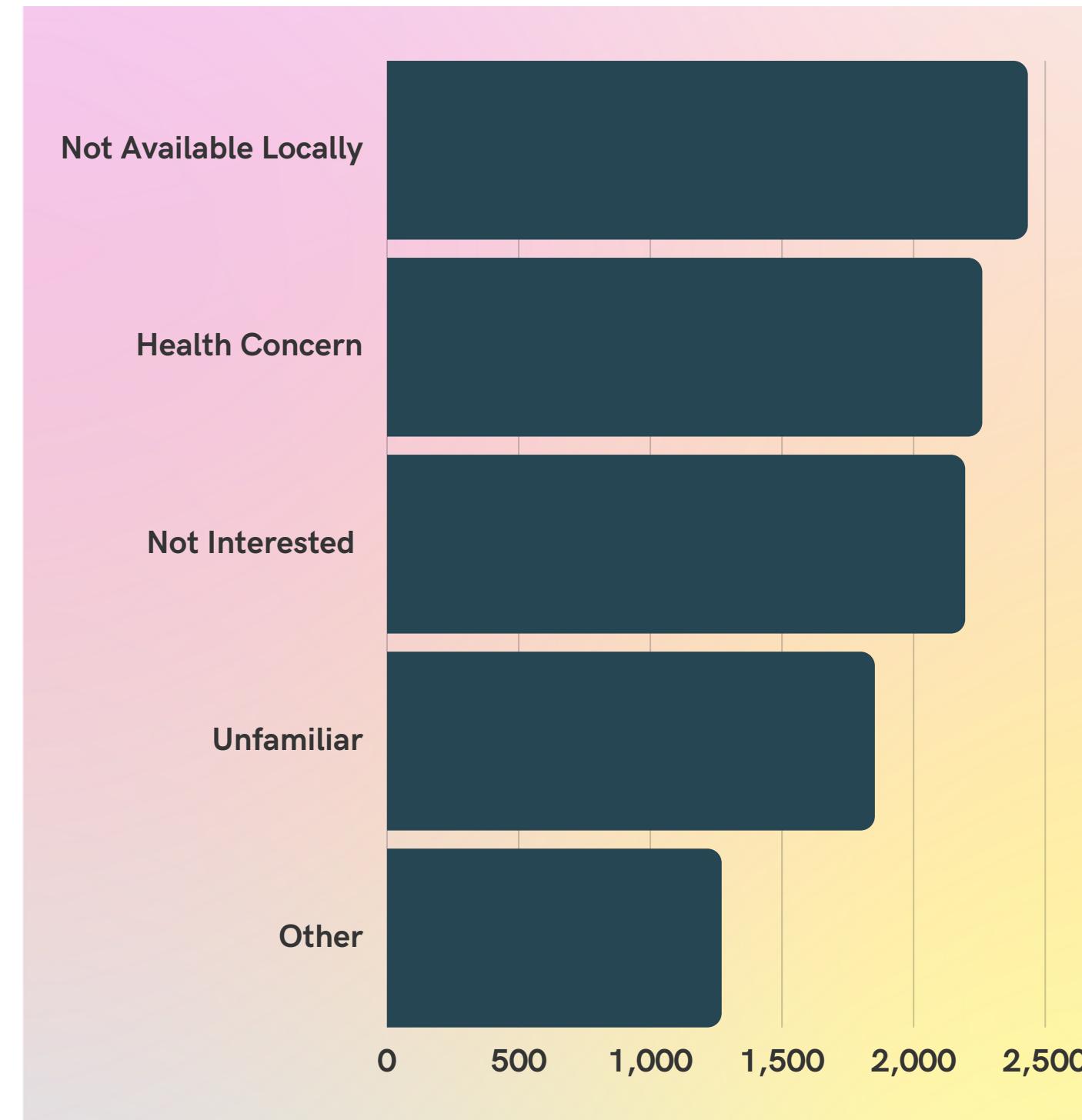
- "Cans and bottles emerge as the preferred choices for packaging among consumers, owing to their convenience in terms of portability and aesthetic appeal. Not only are they easy to carry, but they also provide a stylish and visually appealing look when held."

Consumer Preferences



What are the key factors influencing consumers decision to try new energy drinks brands?

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```
SELECT
    reasons_preventing_trying AS Factors,
    COUNT(respondent_id) AS Total_Response
FROM
    fact_survey_response
GROUP BY Factors
ORDER BY Total_Response DESC;
```

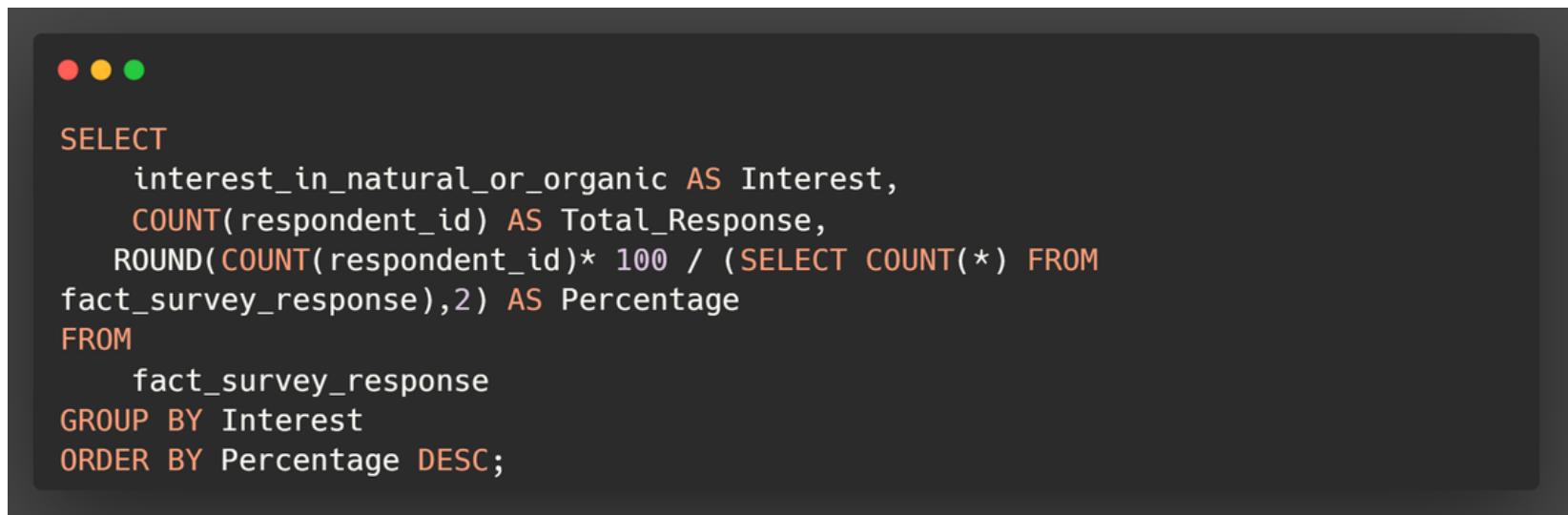
Factors	Total_Response
Not available locally	2431
Health concerns	2258
Not interested in energy drinks	2193
Unfamiliar with the brand	1850
Other	1268

- The key factors influencing consumers' decisions to try new energy drink brands are the unavailability of the brand locally, with 2,431 respondents indicating this as a significant factor, followed closely by health concerns, identified by 2,258 respondents.

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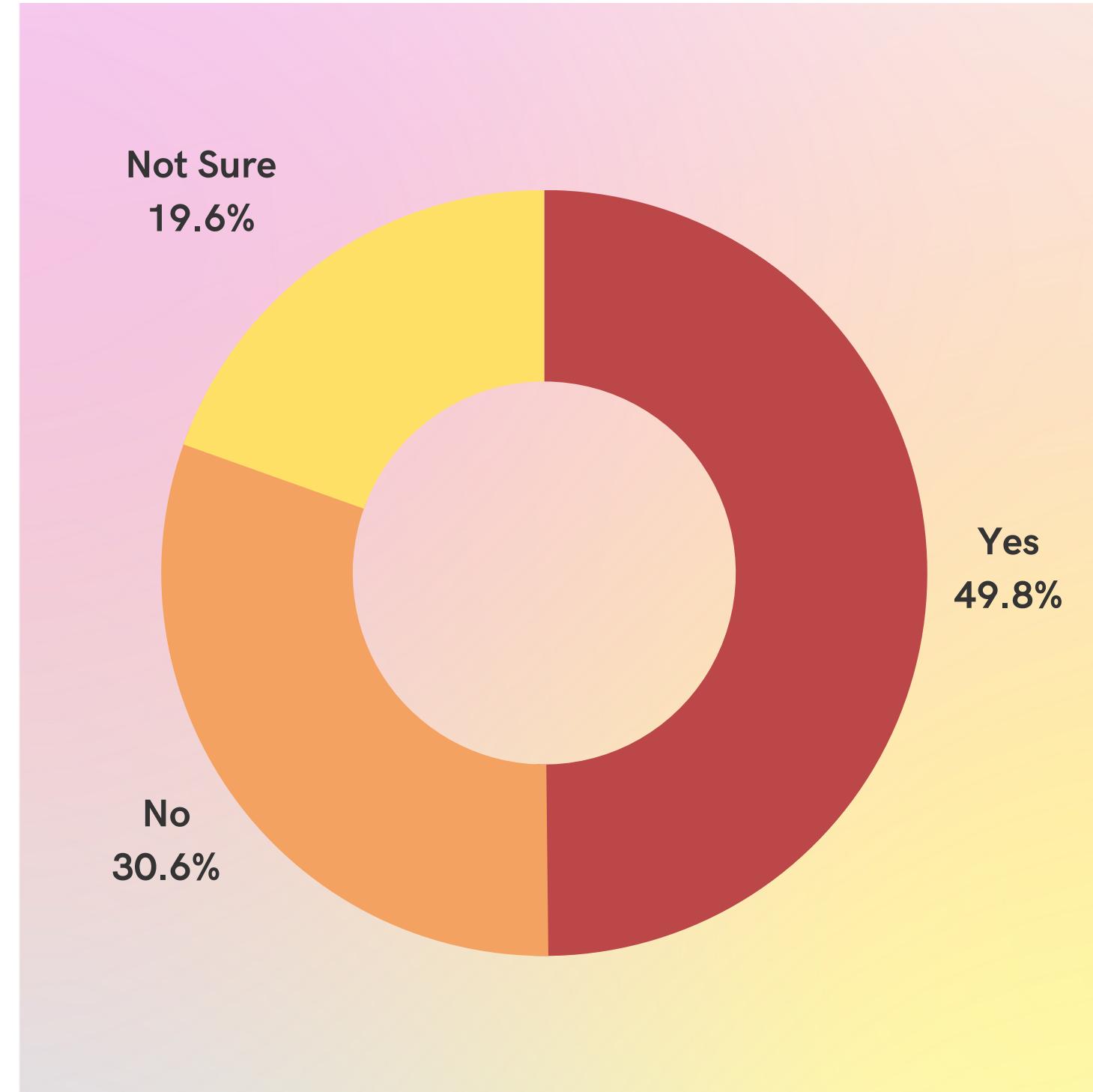
Consumer Preferences

Are Consumers willing to pay a premium for energy drinks with natural or organic ingredients?



Interest	Total_Response	Percentage
Yes	4983	49.83
No	3062	30.62
Not Sure	1955	19.55

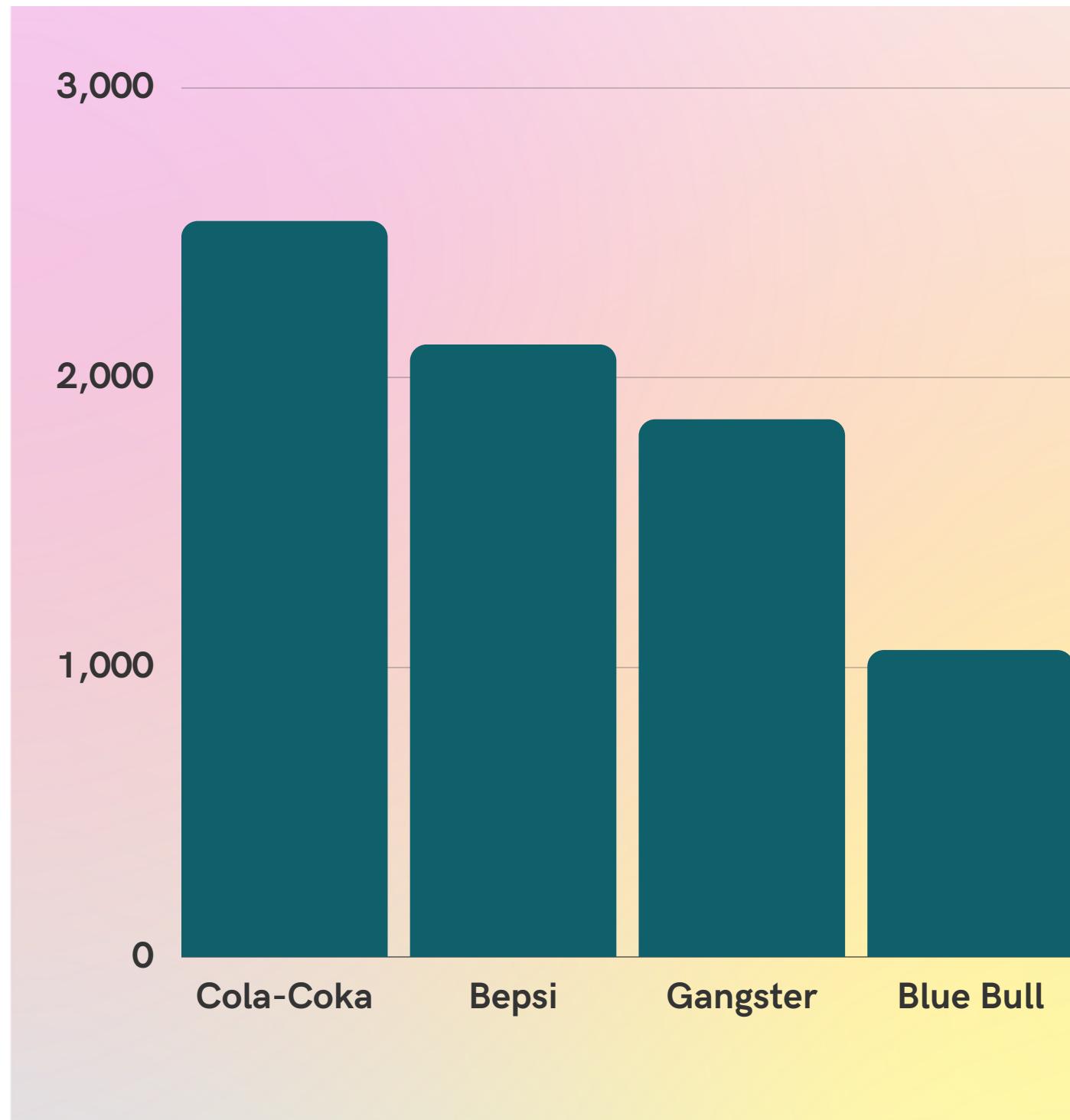
- A significant portion of consumers, approximately 49.83%, express willingness to pay a premium for energy drinks that contain natural or organic ingredients, while 30.62% of respondents indicate otherwise.



Competition Analysis

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Who are the current market leaders?



SELECT

```
current_brands,  
COUNT(respondent_id) AS Total_Respondents  
FROM  
fact_survey_response  
GROUP BY current_brands  
ORDER BY 2 DESC  
LIMIT 4;
```

current_brands	Total_Respondents
Cola-Coka	2538
Bepsi	2112
Gangster	1854
Blue Bull	1058

- Cola-Coka, Bepsi, and Gangsters currently dominate the energy drinks market as the leading brands.



Competition Analysis

What are the primary reasons consumers prefer those brands over ours?

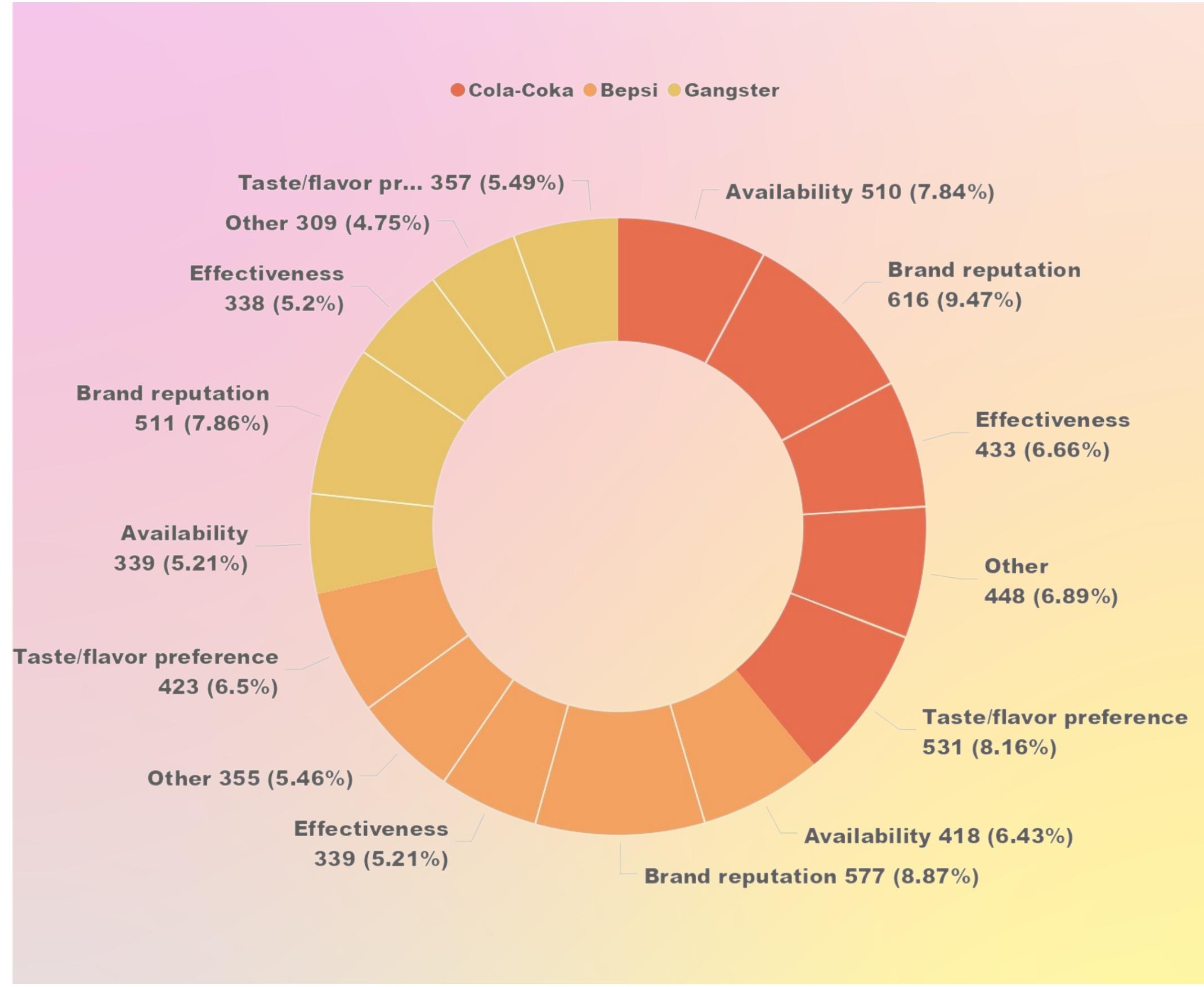
```
WITH brands AS (
    SELECT
        current_brands, COUNT(respondent_id) AS Total_Respondents
    FROM
        fact_survey_response
    GROUP BY current_brands
    ORDER BY Total_Respondents DESC
)
SELECT
    b.current_brands AS current_brands,
    sr.reasons_for_choosing_brands AS reasons_choosing_brands,
    COUNT(sr.reasons_for_choosing_brands) AS Total_Response_Over_Choose
FROM
    brands b
    JOIN
        fact_survey_response sr USING (current_brands)
GROUP BY b.current_brands , sr.reasons_for_choosing_brands
ORDER BY current_brands , Total_Response_Over_Choose DESC;
```

current_brands	reasons_choosing_brands	Total_Response_Over_Choose
Bepsi	Brand reputation	577
Bepsi	Taste/flavor preference	423
Bepsi	Availability	418
Bepsi	Other	355
Bepsi	Effectiveness	339
Blue Bull	Brand reputation	289
Blue Bull	Taste/flavor preference	237
Blue Bull	Effectiveness	187
Blue Bull	Availability	180
Blue Bull	Other	165
CodeX	Brand reputation	259
CodeX	Availability	195
CodeX	Taste/flavor preference	182
CodeX	Effectiveness	176
CodeX	Other	168

Competition Analysis

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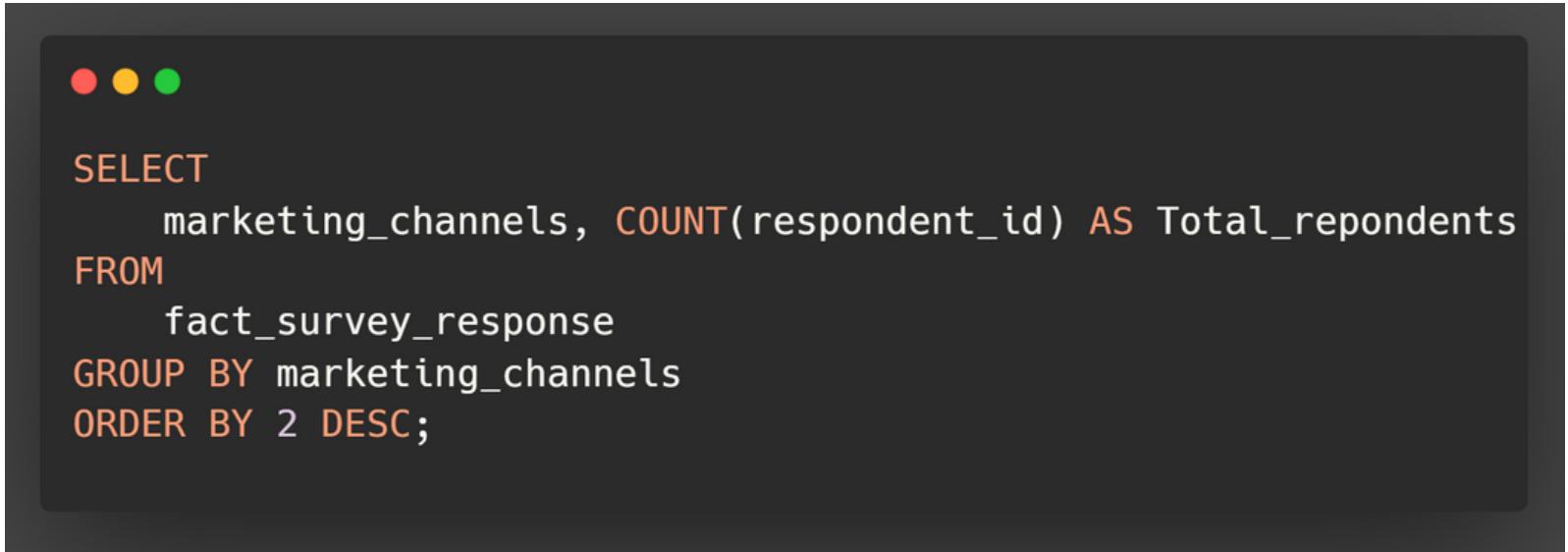


- Brand reputation emerged as a significant factor across multiple brands, with respondents citing it as a reason for choosing brands
- Availability played a role in the brand selection process, as respondents mentioned,
- Understanding these preferences can help the CodeX brand tailor their marketing strategies to emphasize its strengths and address weaknesses. By focusing on brand reputation, taste/flavor preferences, availability, and effectiveness, brands can better position themselves to attract and retain customers.

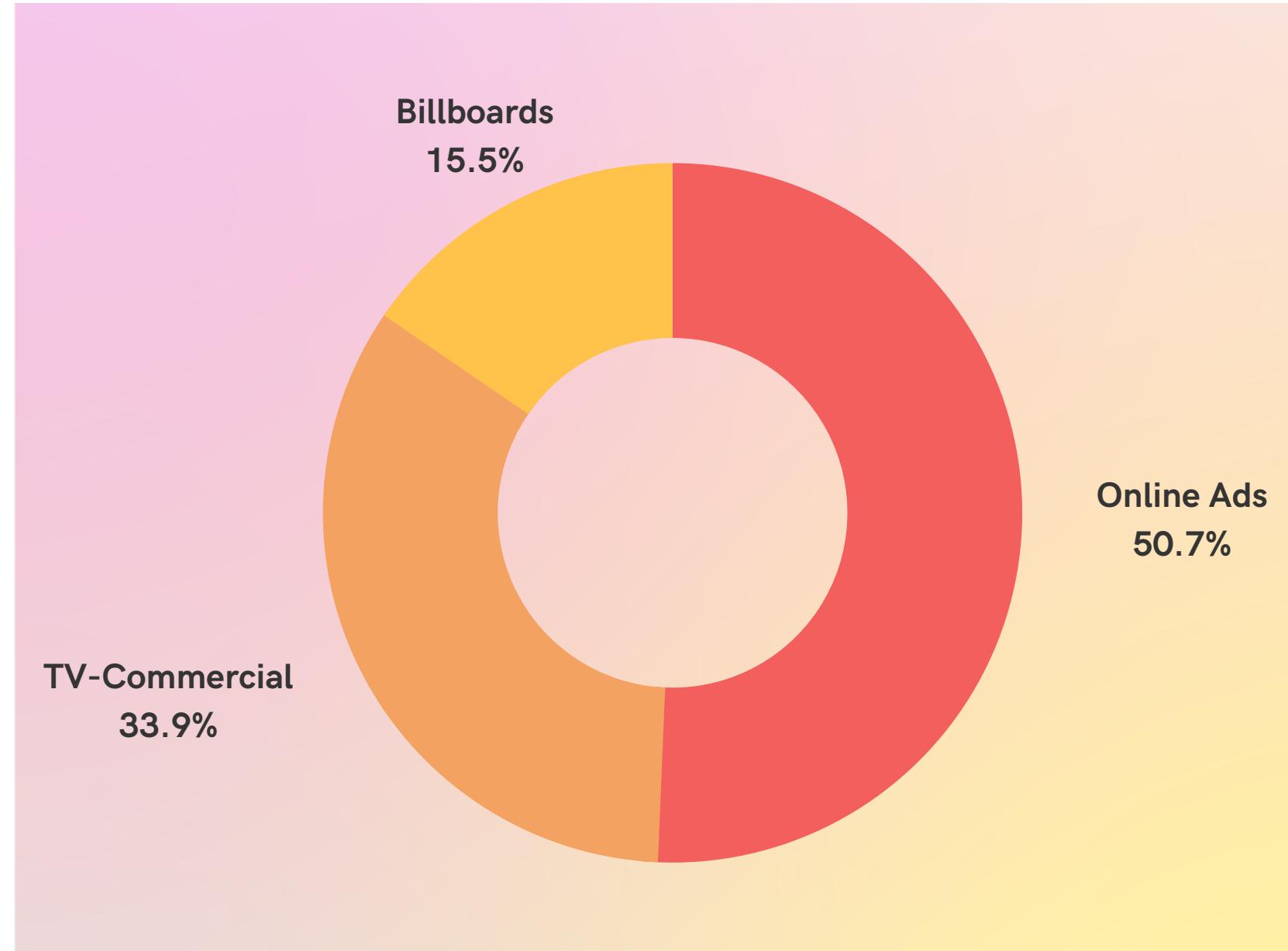
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Marketing Channels and Brand Awareness

Which marketing channel can be used to reach more customers?



marketing_channels	Total_repondents
Online ads	4020
TV commercials	2688
Outdoor billboards	1226
Other	1225
Print media	841



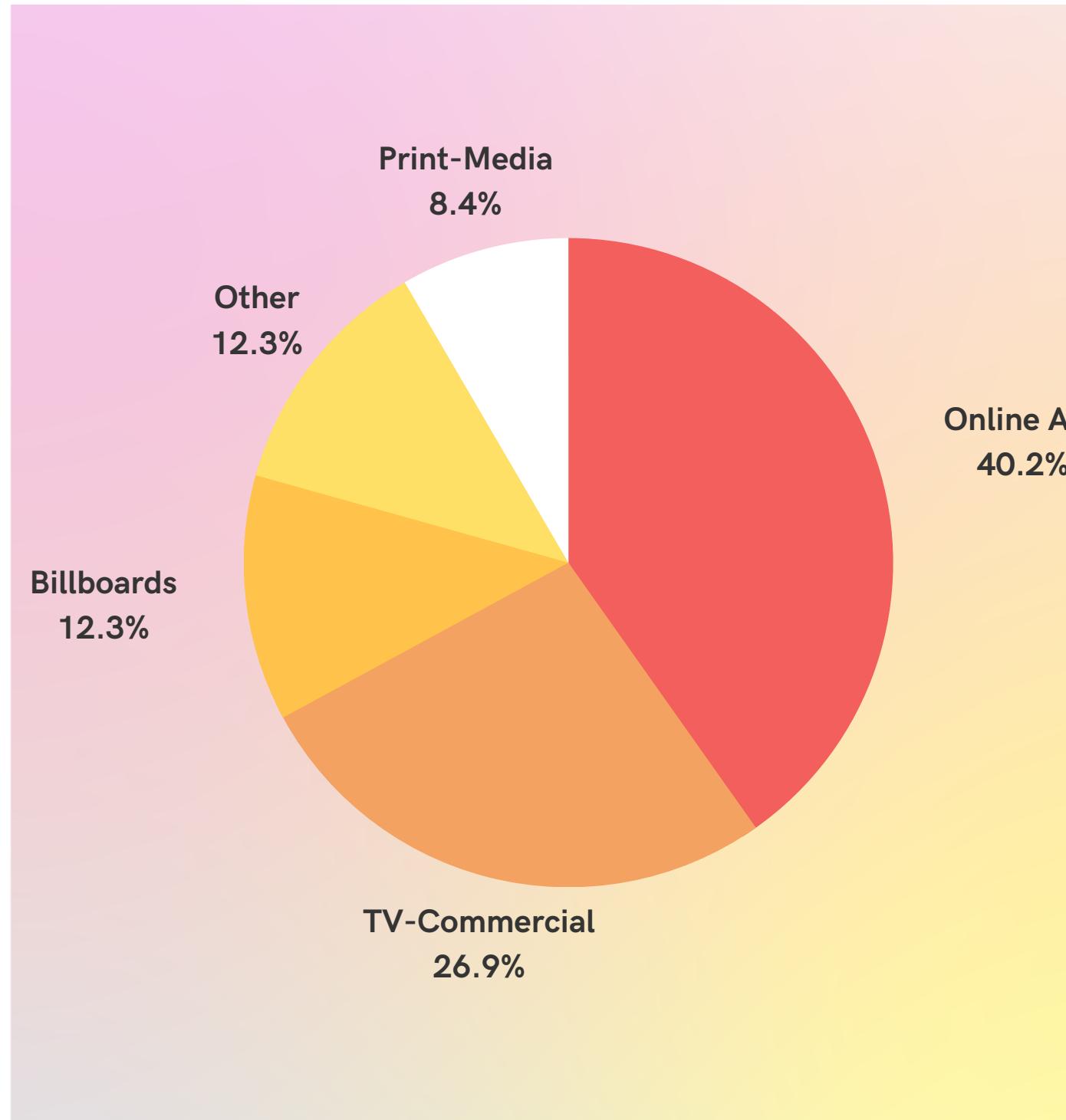
- The online channel stands out as the most effective marketing strategy for promoting brands among youths.

Marketing Channels and Brand Awareness

How effective are different marketing strategies and channels in reaching our customers?

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```

●●●

WITH marketing_channels AS (
  SELECT
    marketing_channels, COUNT(respondent_id) AS Total_Respondents
  FROM
    fact_survey_response
  GROUP BY marketing_channels
)
SELECT *, 
  ROUND(Total_Respondents*100/ SUM(Total_Respondents) OVER( ), 2) AS
  'Effectiveness_pct'
FROM marketing_channels
ORDER BY Effectiveness_pct DESC;
  
```

marketing_channels	Total_Respondents	Effectiveness_pct
Online ads	4020	40.20
TV commercials	2688	26.88
Outdoor billboards	1226	12.26
Other	1225	12.25
Print media	841	8.41

- According to the given set of respondents, the online channel emerges as the most effective marketing channel, closely followed by TV commercials and Outdoor Billboards.

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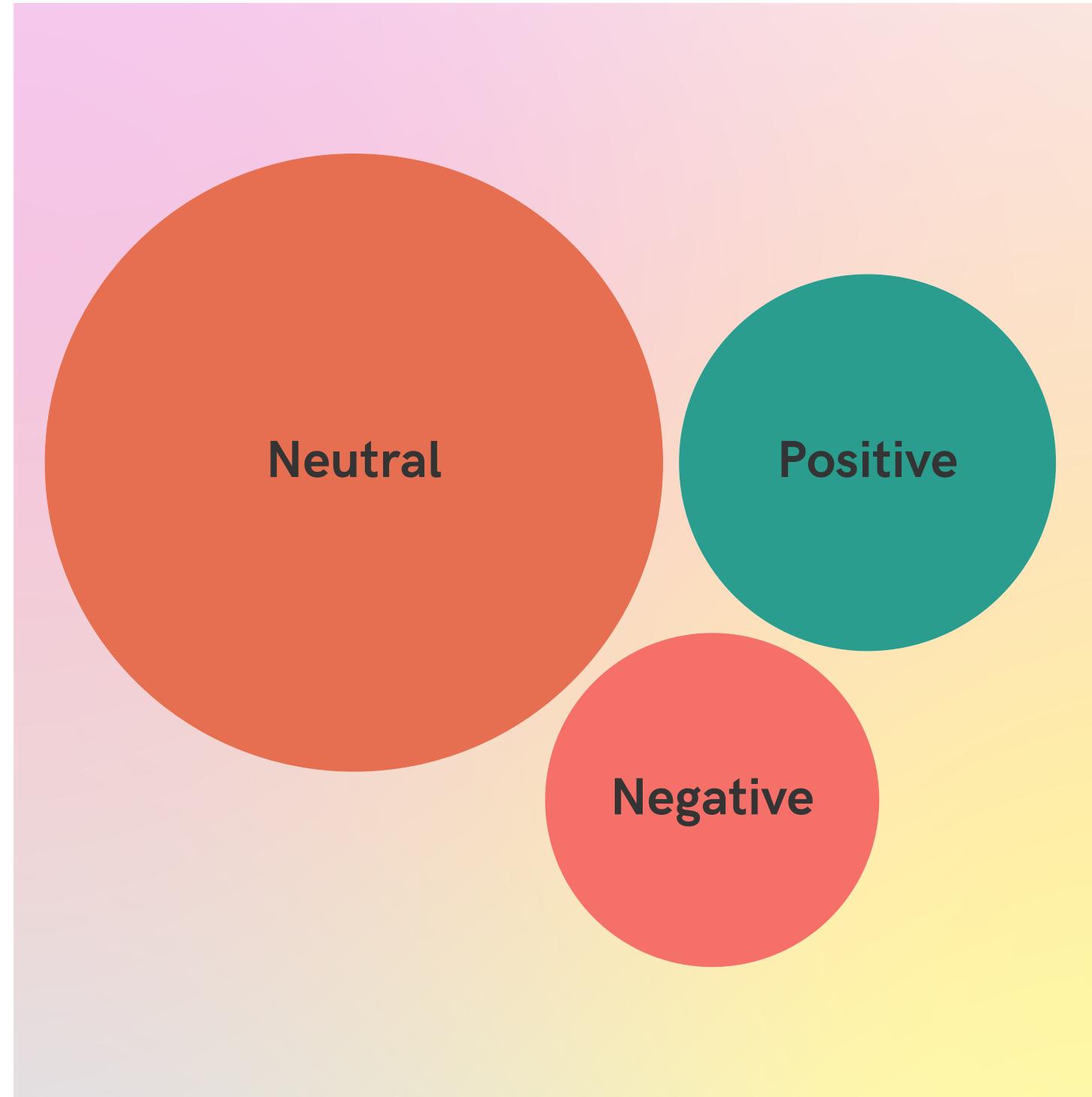
Brand Penetration

What do people think about our brand? (overall rating)

```
● ● ●  
SELECT  
    current_brands AS Brands,  
    brand_perception AS Perceptions,  
    COUNT(respondent_id) AS Total_respondents  
FROM  
    fact_survey_response  
WHERE  
    current_brands = "CodeX"  
GROUP BY Brands,Perceptions  
ORDER BY Total_respondents DESC;
```

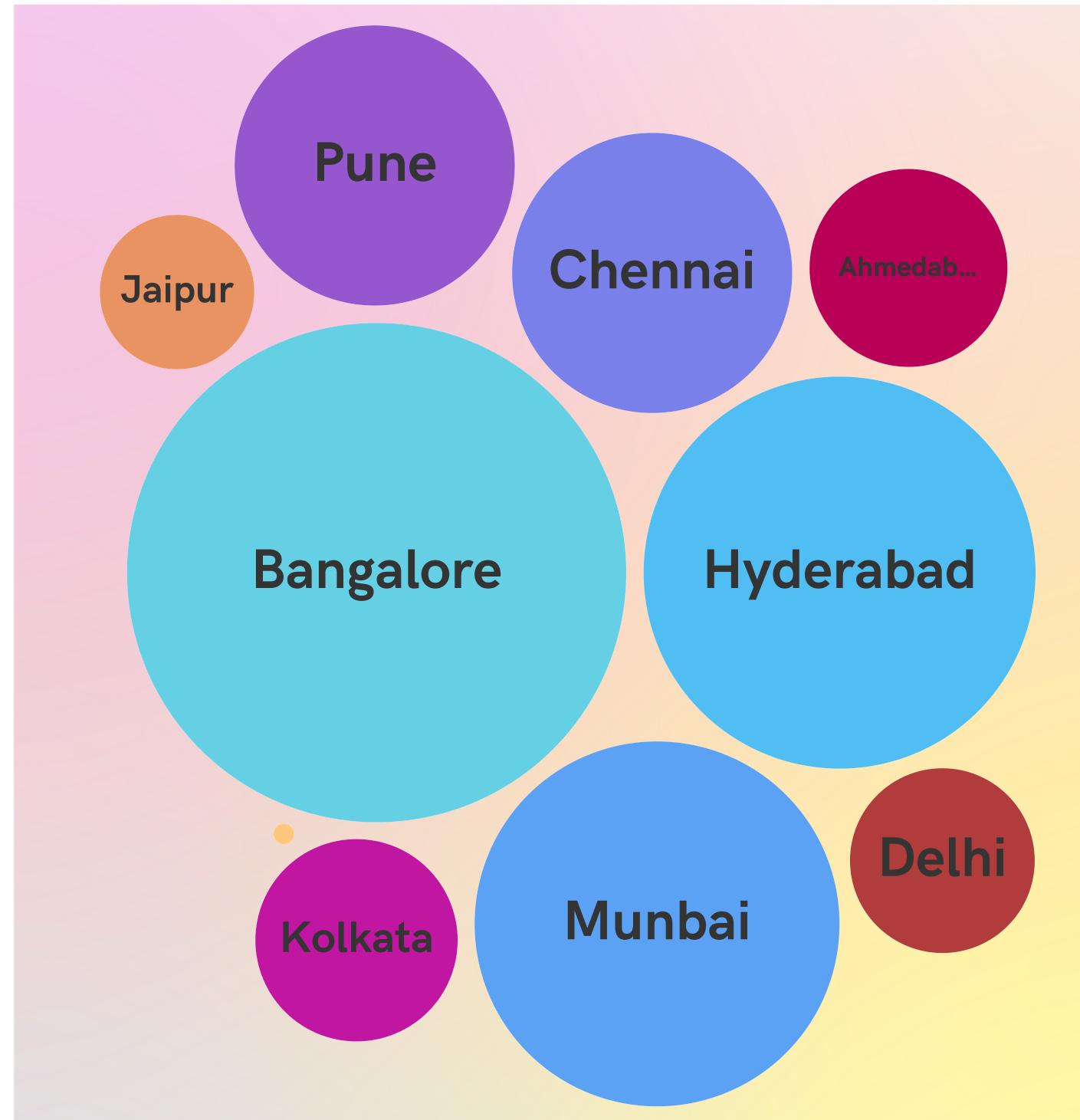
Brands	Perceptions	Total_respondents
CodeX	Neutral	589
CodeX	Positive	219
CodeX	Negative	172

- While most of the respondents provided neutral feedback about Codex, there is an opportunity for the company to implement effective marketing strategies that can convert these neutral respondents into positive and satisfied customers.



Brand Penetration

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Which cities do we need to focus more on?

```
SELECT
    c.city, COUNT(s.respondent_id) AS Customer_Count
FROM
    dim_cities c
    JOIN
    fact_survey_response_city s USING (city_id)
WHERE
    s.current_brands LIKE '%CodeX'
GROUP BY c.city
ORDER BY Total_response;
```

City	Customer Count
Bangalore	292
Hyderabad	182
Mumbai	156
Chennai	92
Pune	92
Kolkata	48
Ahmedabad	45
Delhi	40
Jaipur	28
Lucknow	5

- Bangalore emerges as the frontrunner with the highest number of respondents, followed by Hyderabad and Mumbai, indicating significant market potential. To capitalize on this opportunity, CodeX should prioritize and focus its efforts on Hyderabad and Mumbai to leverage the tremendous growth potential present in these cities.

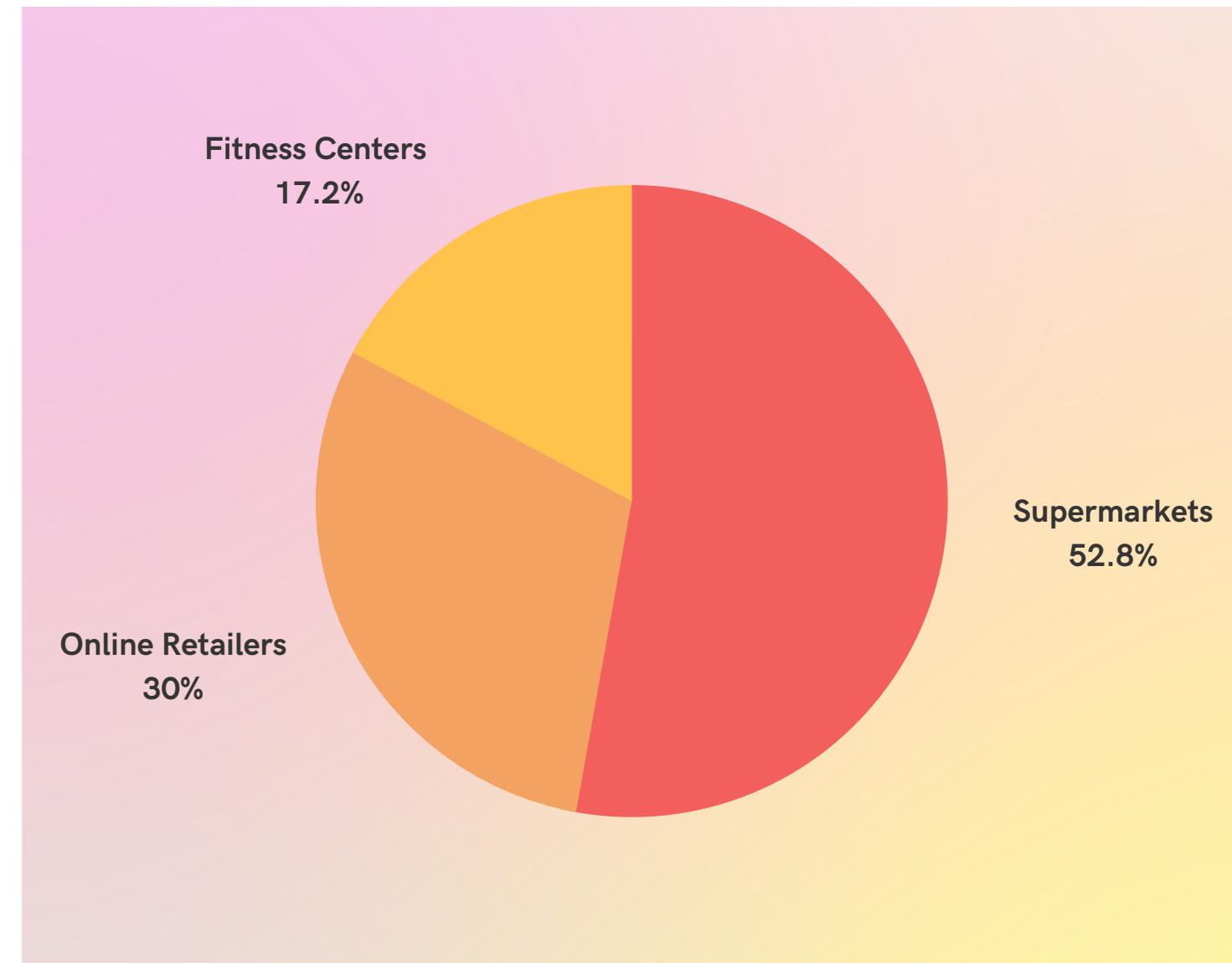


Purchase Behaviour

Where do respondents prefer to purchase energy drinks?

```
WITH Preferred_Locations AS (
  SELECT
    purchase_location,
    COUNT(respondent_id) AS customer_count
  FROM
    fact_survey_response
  GROUP BY purchase_location
)
SELECT
  *,
  ROUND(customer_count * 100 / SUM(customer_count) OVER(),2) AS 'Respondents_pct_Location'
FROM preferred_locations
ORDER BY 2 DESC;
```

purchase_location	customer_count	Respondents_pct_Location
Supermarkets	4494	44.94
Online retailers	2550	25.50
Gyms and fitness centers	1464	14.64
Local stores	813	8.13
Other	679	6.79

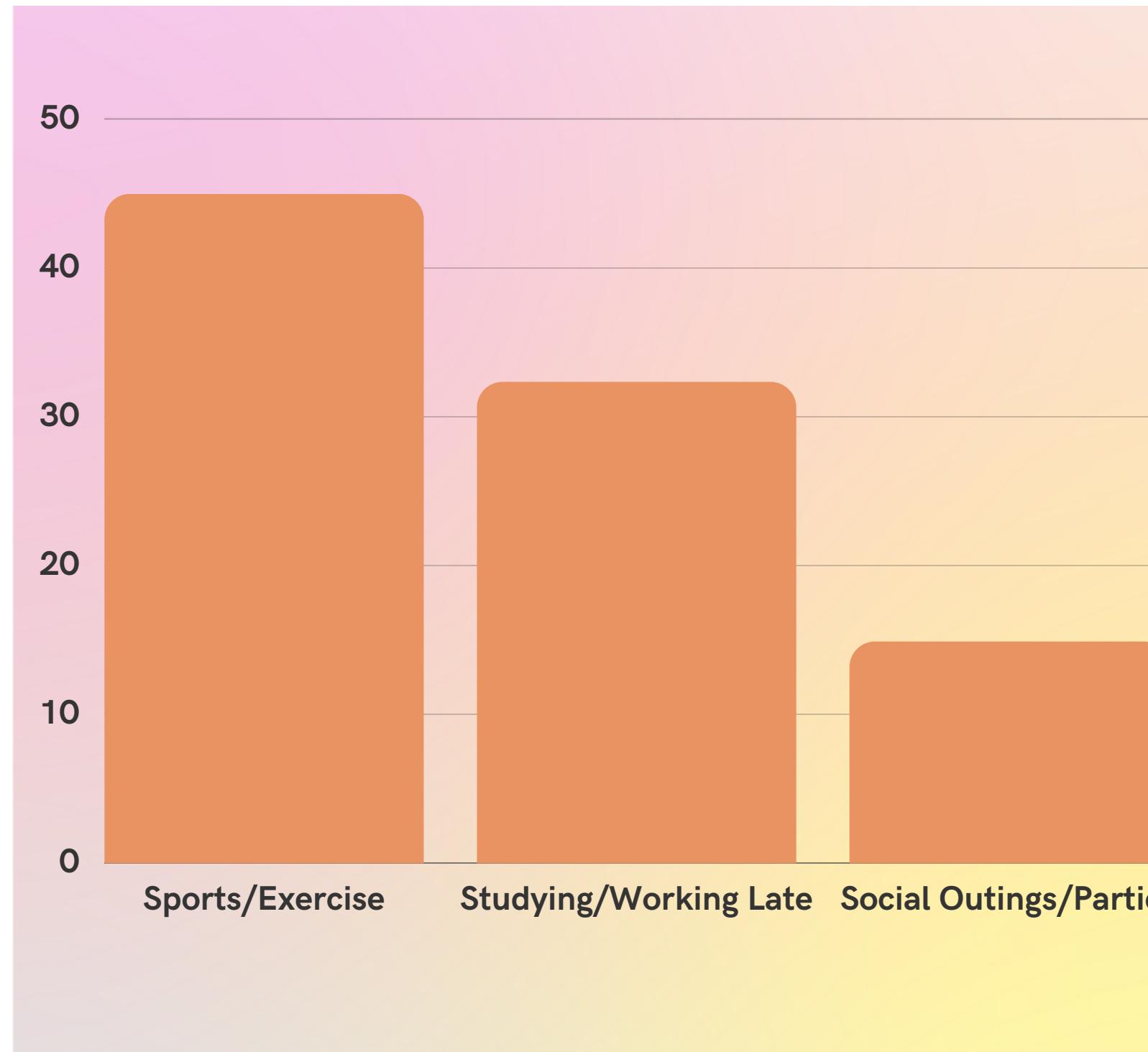


- When it comes to purchase location preference, it is evident that energy drink consumers have a strong inclination towards buying their energy drinks from supermarkets and online stores.

Purchase Behaviour

What are the typical consumption situations for energy drinks among respondents?

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```

WITH consumption_situation AS (
  SELECT
    typical_consumption_situations,
    COUNT(respondent_id) AS Customer_count
  FROM
    fact_survey_response
  GROUP BY typical_consumption_situations
)
SELECT
  *,
  ROUND(Customer_count *100/ SUM(Customer_count) OVER(), 2) AS
Customer_pct
FROM
  consumption_situation
ORDER BY 2 DESC;
  
```

typical_consumption_situations	Customer_count	Customer_pct
Sports/exercise	4494	44.94
Studying/working late	3231	32.31
Social outings/parties	1487	14.87
Other	491	4.91
Driving/commuting	297	2.97

- Energy drink consumption is most prevalent during sports/exercise, studying/working late, and social outings/parties, indicating that consumers associate these activities with the need for an energy boost.



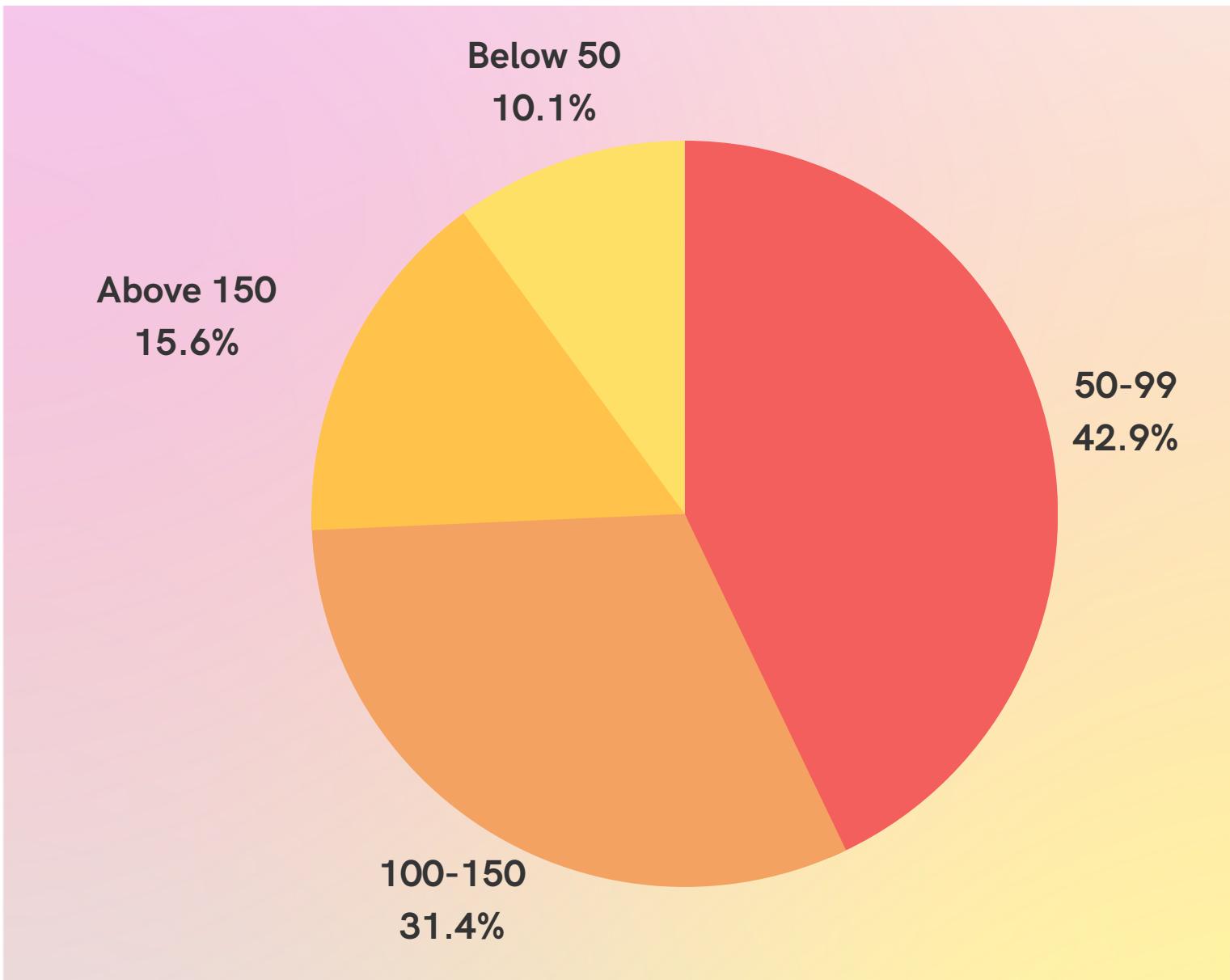
Purchase Behaviour

What factors influence respondents' purchase decisions, such as price range and limited edition packaging?

- Price Range

```
●●●  
WITH price_ranges AS (  
    SELECT  
        price_range,  
        COUNT(respondent_id) AS Customer_Count  
    FROM  
        fact_survey_response  
    GROUP BY price_range  
)  
SELECT  
    *,  
    ROUND(Customer_count * 100 / SUM(Customer_count) OVER( ), 2) AS Customer_pct  
FROM  
    price_ranges  
ORDER BY 2 DESC;
```

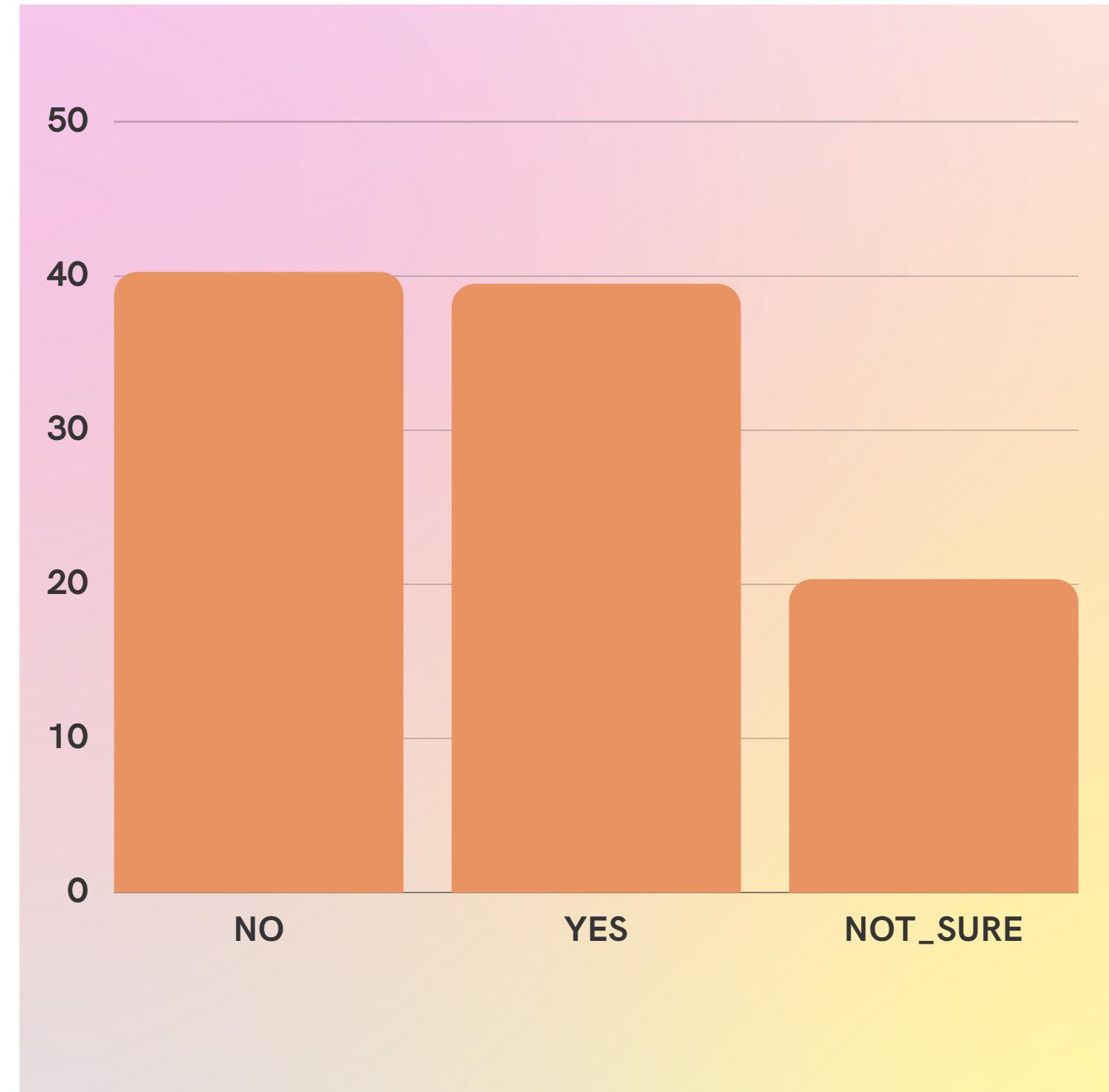
	price_range	Customer_Count	Customer_pct
▶	50-99	4288	42.88
	100-150	3142	31.42
	Above 150	1561	15.61
	Below 50	1009	10.09



- The data shows an inverse relationship between the count of respondents and prices, indicating that as prices increase, the number of respondents decreases. However, it is noteworthy that the lowest total number of respondents is observed when the price range is below 50. On the other hand, the price range of 50-99 stands out with the highest number of customers.

Purchase Behaviour

- Limited edition Packaging



```
WITH limited_edition_pack AS (
    SELECT
        limited_edition_packaging,
        COUNT(respondent_id) AS Customer_count
    FROM
        fact_survey_response
    GROUP BY limited_edition_packaging
)
SELECT
    *,
    ROUND(Customer_count * 100 / SUM(Customer_count) OVER(),2) AS Customer_pct
FROM limited_edition_pack
ORDER BY 2 DESC;
```

limited_edition_packaging	Customer_count	Customer_pct
No	4023	40.23
Yes	3946	39.46
Not Sure	2031	20.31

- The data reveals that respondents' opinions on the limited edition packaging are fairly divided, with 40.23% responding negatively, 39.46% responding positively, and 20.31% remaining unsure. This suggests that the reception towards the limited edition packaging is mixed, indicating the need for further evaluation and analysis to determine the overall impact and effectiveness of the packaging strategy.

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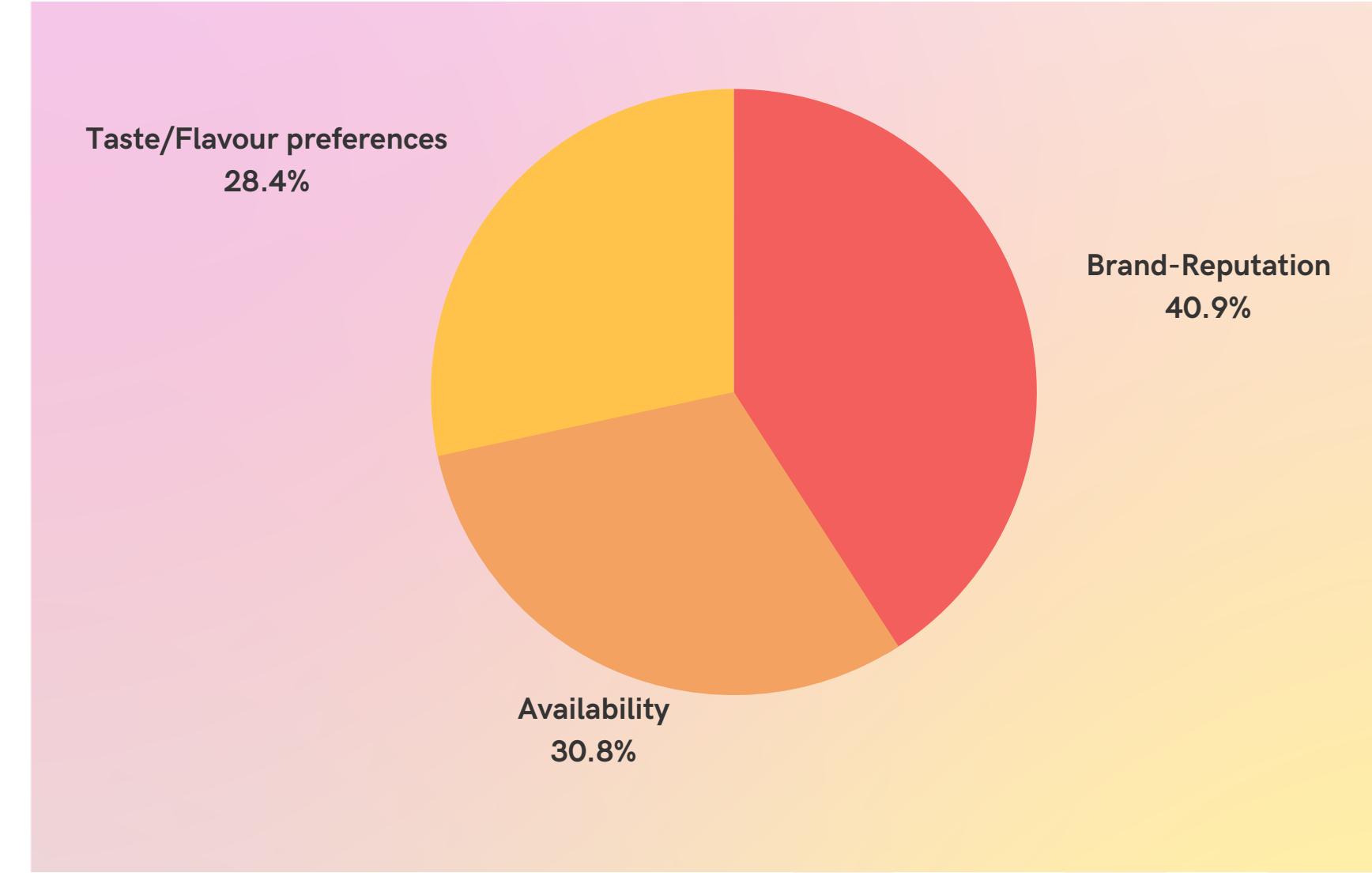
Product Development

Which area of business should we focus more on our product development? (Branding/taste/availability)

```
● ● ●  
SELECT  
    resaons_for_choosing_brands,  
    COUNT(respondent_id) AS Total_response  
FROM  
    fact_survey_response  
WHERE  
    current_brands = 'CodeX'  
GROUP BY resaons_for_choosing_brands  
ORDER BY 2 DESC;
```

resaons_for_choosing_brands	Total_response
Brand reputation	259
Availability	195
Taste/flavor preference	182
Effectiveness	176
Other	168

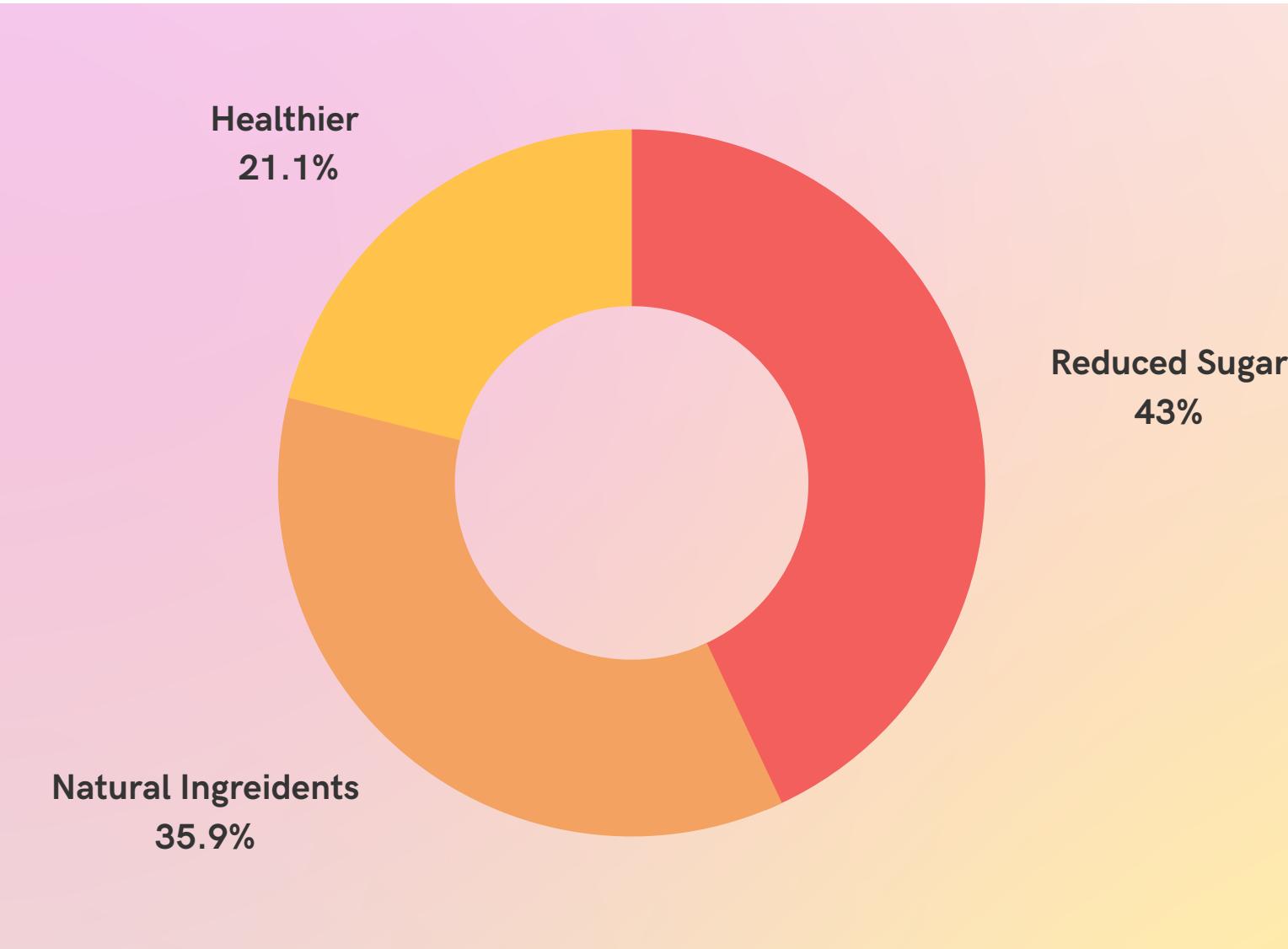
- Reasons For Choosing Brands



- Brand reputation and product availability are identified as the two primary factors that significantly attract a customer base.

Recommendations





- consumers are increasingly conscious of their sugar intake and prioritize energy drinks with reduced sugar content. Additionally, the demand for energy drinks with natural ingredients reflects a growing preference for healthier options.

What immediate improvements can we bring to the product?



```

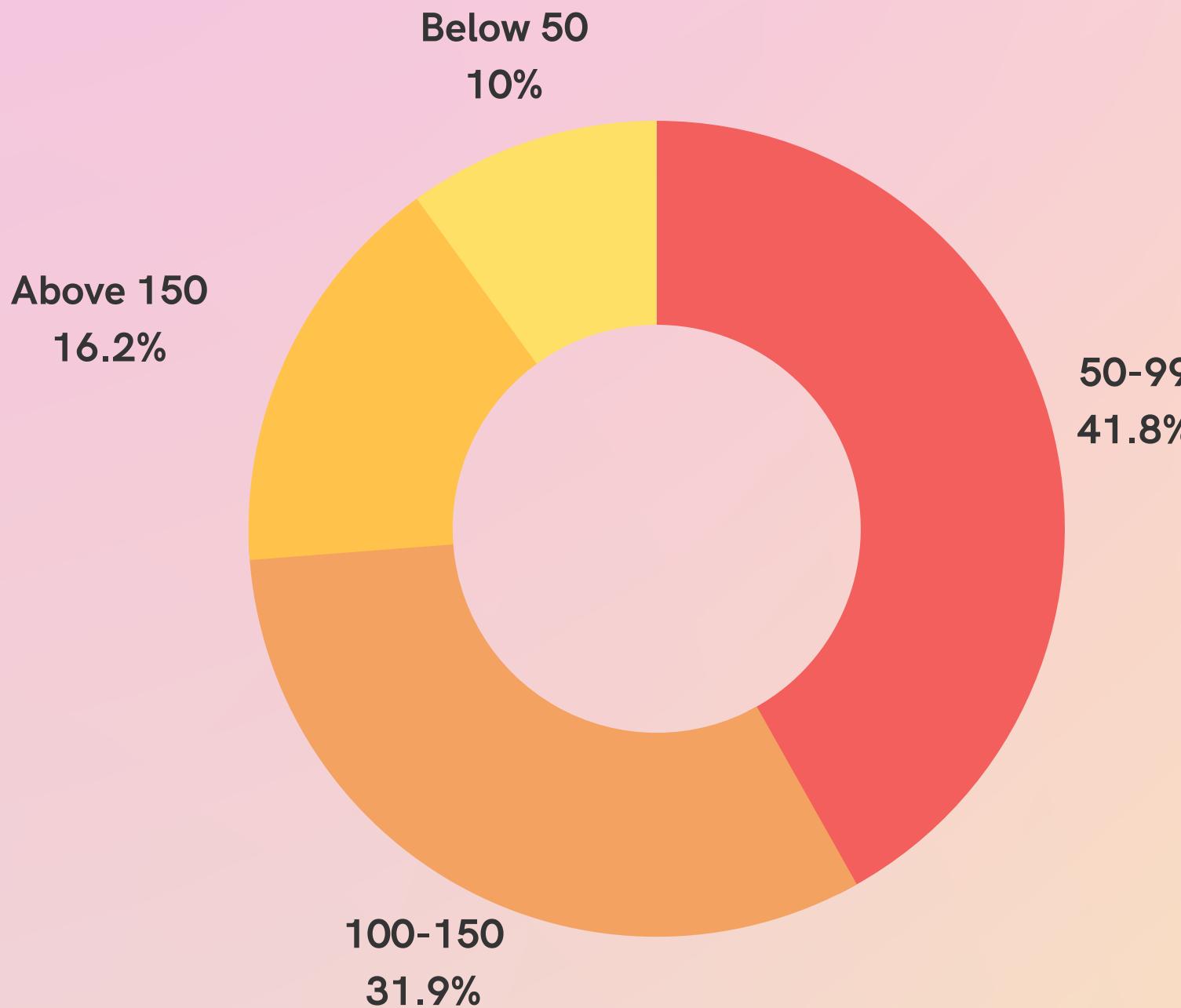
SELECT
    SUM(CASE
        WHEN improvement_desired = 'Reduced sugar content' THEN 1
        ELSE 0
    END) AS Reduced_Sugar,
    SUM(CASE
        WHEN improvement_desired = 'More natural ingredients' THEN 1
        ELSE 0
    END) AS Natural_Ingredients,
    SUM(CASE
        WHEN improvement_desired = 'Wider range of flavours' THEN 1
        ELSE 0
    END) AS Range_Flavours,
    SUM(CASE
        WHEN improvement_desired = 'Healthier alternatives' THEN 1
        ELSE 0
    END) AS Healthier_Alternatives,
    SUM(CASE
        WHEN improvement_desired = 'Other' THEN 1
        ELSE 0
    END) AS OTHER
FROM
    fact_survey_response;
  
```

Reduced_Sugar	Natural_Ingredients	Range_Flavours	Healthier_Alternatives	OTHER
2995	2498	0	1472	998

What should be the ideal price of our product?

FUNCTION MARKETING

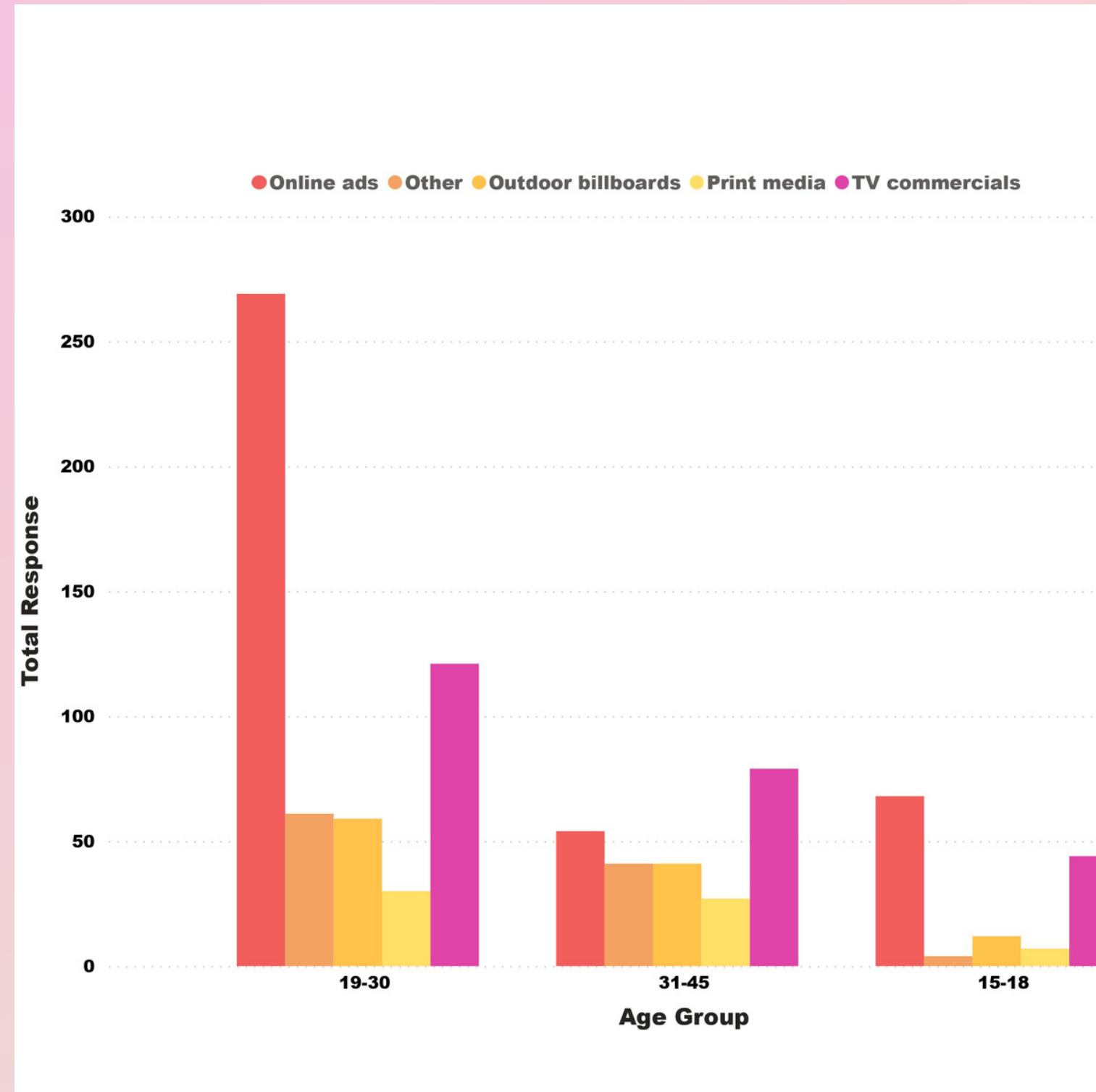
F & B DOMAIN



- CodeX should confidently strive to establish a competitive price range between 50 and 99, as this will likely resonate well with the target market and attract a significant number of consumers.

```
WITH price_ranges AS (
  SELECT
    current_brands,
    price_range,
    COUNT(respondent_id) AS Customer_Count
  FROM
    fact_survey_response
  WHERE
    current_brands = 'CodeX'
  GROUP BY price_range,current_brands
)
SELECT
  *,
  ROUND(Customer_count * 100 / SUM(Customer_count) OVER(), 2) AS Customer_pct
FROM
  price_ranges;
```

current_brands	price_range	Customer_Count	Customer_pct
CodeX	50-99	410	41.84
CodeX	100-150	313	31.94
CodeX	Above 150	159	16.22
CodeX	Below 50	98	10.00



Who should be our target audience, and why

```

SELECT
    r.age,
    s.marketing_channels,
    COUNT(r.respondent_id) AS Total_Response
FROM
    dim_repondents r JOIN fact_survey_response s USING(respondent_id)
WHERE
    current_brands = 'CodeX'
GROUP BY age, marketing_channels
ORDER BY Total_Response;
  
```

- The age group of 15-45 is characterized by a generation that is highly open to trying new products, including energy drinks.

WHAT KIND OF MARKETING CAMPAIGNS, OFFERS, AND DISCOUNTS WE CAN RUN



To effectively reach its major customer base, Codex should consider the following marketing strategies:

Online Channels:

1. Focus on social media platforms, such as Facebook, Instagram, and Twitter.
2. Utilize targeted ads and engaging content to connect with the youth demographic aged 15-30.
3. Explore YouTube ads and collaborations with popular influencers in the energy drink niche.
4. Advertise on music streaming platforms, leveraging the popularity of music among the target audience.

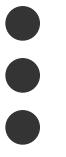
TV Commercials:

1. Incorporate TV commercials into the marketing strategy.
2. Choose channels that cater to viewers aged 31-45, such as news channels, sports channels, and reality TV shows.
3. Create captivating ads that highlight the unique features and benefits of Codex energy drinks.
4. Optimize the commercial placements to ensure maximum reach and impact.

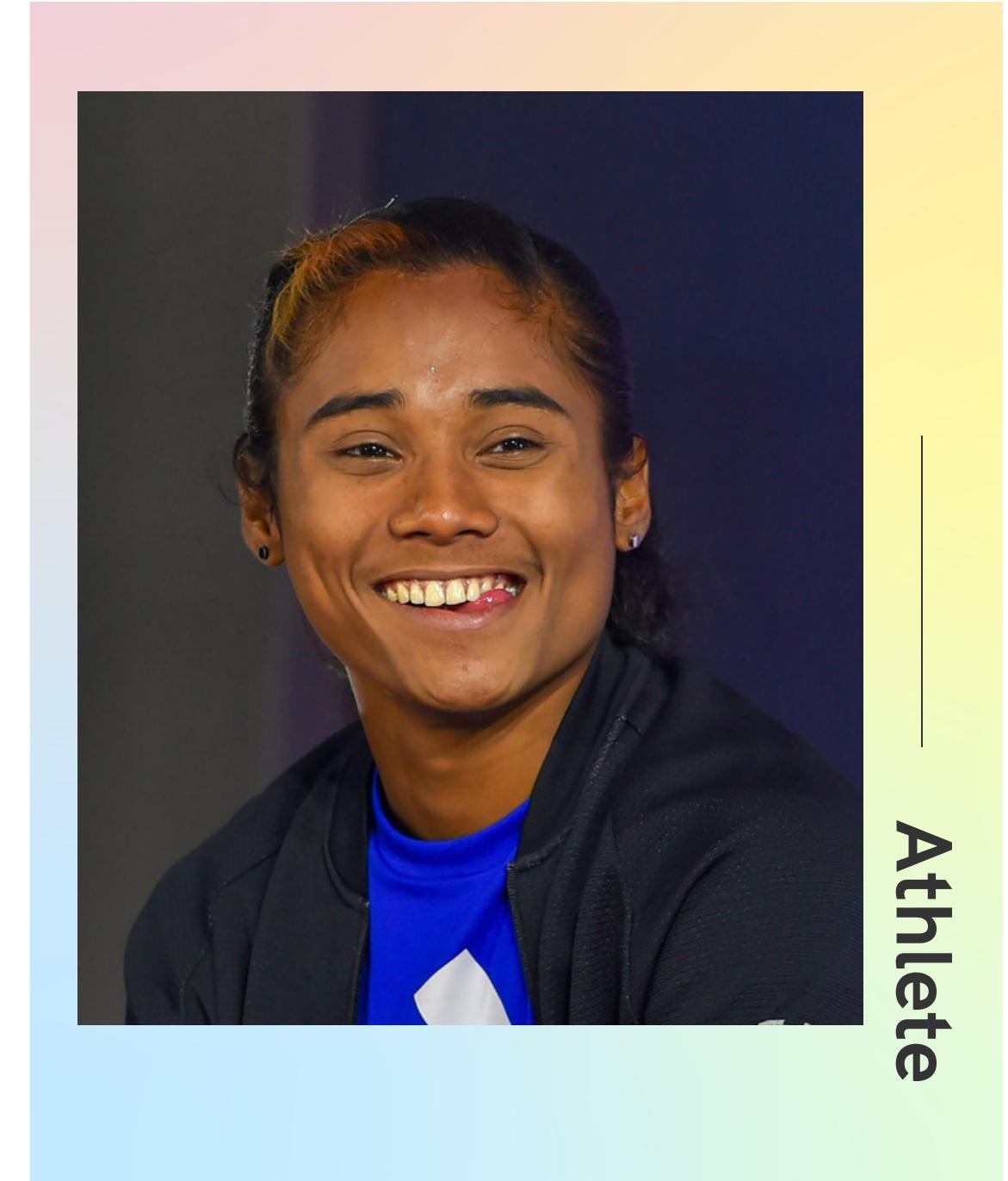
Discounts:

1. Codex should consider running various discounts and offers to attract customers and increase sales of their energy drinks.
2. Promotional bundles, loyalty programs, limited-time offers, and referral programs can be effective in incentivizing customers to choose Codex.
3. Targeting specific demographics, such as students, and collaborating with relevant organizations or running social media contests can help create a buzz around the brand and boost customer engagement.

WHO CAN BE A BRAND AMBASSADOR, AND WHY ?



Hima Das, a prominent Indian athlete, would be a suitable brand ambassador for an energy drink brand in India due to her athletic achievements, youth appeal, advocacy for health and fitness, national pride, and strong social media presence. Her success, relatability, and ability to inspire the target audience make her an excellent choice to represent the brand and amplify its message.



Athlete



Thank you!

Let us know if you have questions or clarifications.