

THE MARKET OF GUT HEALTH

In recent years, the gastrointestinal (GI) system has been linked to numerous aspects of health: from digestion to weight management to immunity to chronic illnesses, and even to sleep problems or skin health.

About 70 million Americans are estimated to be affected by digestion discomforts. As scientists continue to explore the role played by the GI on human health, there is no doubt that the digestive health market will continue to boom: the global digestive health products market is expected to grow to \$ 59 Billion by 2025*.

Many consumers today know that a happy, healthy gut is key for overall wellbeing. There is significant demand for food, beverage and dietary supplements with digestive health advantages. A third of American consumers would be more likely to purchase a product that would support

their digestive system and 40% of consumers are willing to try food or beverages if it will aid their digestive health.

Manufacturers must understand the expectations of consumers and provide safe and natural products that answer their demands. As the leading manufacturer of acacia gum, Alland & Robert decided to explore the role acacia gum can play in gut health. Our objective: provide scientific data that support the use of acacia gum as a gut health improver.

Scientific research has proven that in addition to being a fiber, acacia gum is a prebiotic.

Alland & Robert decided to go further and conducted a study to evaluate the impact of acacia gum on consumers who suffer from intestinal disorders regularly.

*Digestive Health Products Market by Ingredients, Product Type, Sales Channel, Region Global Industry Analysis, Market Size, Share, Growth, Trends, and Forecast 2018 to 2025. https://www.fiormarkets.com/report/digestive-health-products-market-by-ingredients-dairy-products-385973.html February 20, 2020.

WHAT IS ACACIA GUM?



Acacia gum is safe additive or ingredient, and comes from an exudation of wild Acacia trees growing in the African desert.

From a chemical point of view, acacia gum is a complex polysaccharide.

In food and beverages, it can be present as texture agent, emulsifier, stabilizer, or for its high fiber content.

100% plant based and natural, it also constitutes an alternative of choice for vegetarian and vegan food products.

Acacia Gum is odorless, tasteless and colorless. It has a low calorific value which makes it ideal for dietary applications and supplements, and for fiber enrichment purposes.

Looking for natural and simple products, shortened ingredient lists, ethical products?

Consumers have become increasingly aware and informed about the products they buy. A true "miracle product", acacia gum combines nutritional, functional and environmental strengths with unique properties to respond to societal and food trends.

FIBER STATUS OF ACACIA GUM

In the USA, the dietary fiber status of gum acacia has been approved by the FDA in December 2021. In Europe, acacia gum is recognized as a fiber. Nutrition claims are applicable for acacia gum: "source of fiber" or "high in fiber", depending on the dosage.





Please check local legislation for labelling options.

STUDY PROTOCOL



STUDY

The study was conducted by Merieux NutriSciences, an internationally leading company in consumer insight & sensory marketing. For over 30 years, Merieux NutriSciences has been conducting clinical studies, consumer research & sensory analysis for the development of successful innovations.

All statistical analyzes have been performed by their software, via their proprietary applications.



- √ 57% men / 43% women
- Ranging from 30 to 65 years old
- ✓ 100% declaring to suffer from intestinal disorders regularly and in the last month such as stomach aches, bloating, flatulence, accelerated or slowed down transit.
- ✓ 100% non-refractory to the intake of a natural product to relieve their intestinal pain.
- During the study, no other treatment for digestive issues has been taken, including "soft" treatments such as essential oils, herbal teas, homeopathy.



ORGANIC ACACIA GUM

240 participants in 3 groups with 3 different dosages of organic acacia gum, starting from 10 grams.

Participants took powdered acacia gum at breakfast either in a cold or hot drink, or mixed in their usual breakfast food.



EVALUATION AFTER 30 AND 60 DAYS OF DAILY USE

Each participant had to fill-in 4 questionnaires, each exploring:

- ✓ Impact on symptoms
- ✓ Satisfaction regarding the daily intake of acacia gum
- Impact on daily life

QUESTIONNAIRES TIMELINE T+1 day T + 30 davs T + 60 days Start The day after first use After 30 days of use After 60 days of use • Overall satisfaction Satisfaction of the study • Overall satisfaction Perceived benefits Perceived benefits Perceived benefits Adequacy with several claims · Adequacy with several claims Adequacy with several claims Recommendations intents · Impact of daily life

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RESULTS AT ONE GLANCE

After a daily intake of acacia gum for 60 days, consumers perceive a global improvement of their digestive health and a relief of their intestinal discomfort. **The intake of acacia gum has a beneficial effect on consumers'health and is gut friendly.**



have perceived an **improvement**of their intestinal comfort
after 2 months.



88%

of consumers declare to have **low intestinal pain** after 60 days.



of consumers felt an **improvement of their intestinal comfort** after 1 month.



75%

of consumers perceived a **less swollen belly** after 60 days.



MORE THAN 65%

of consumers felt a **diminution of their stomach ache** after 60 days.



68%

of participants would **recommend a daily intake of acacia gum** for digestive wellness.



of consumers say the intake of acacia gum has a **beneficial effect on their health.**

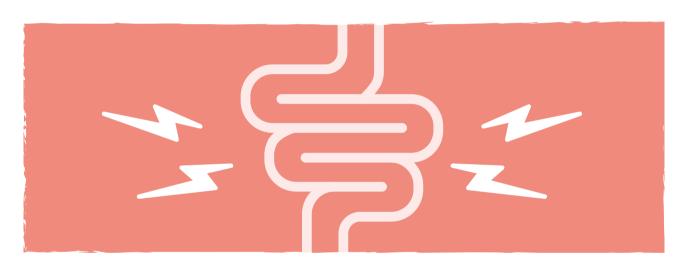


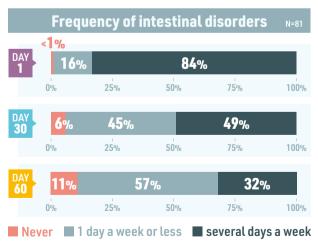
70%

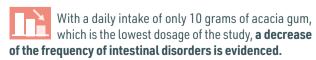
of consumers say the intake of acacia gum **improves their quality of life.**

STUDY RESULTS

General state about intestinal disorders





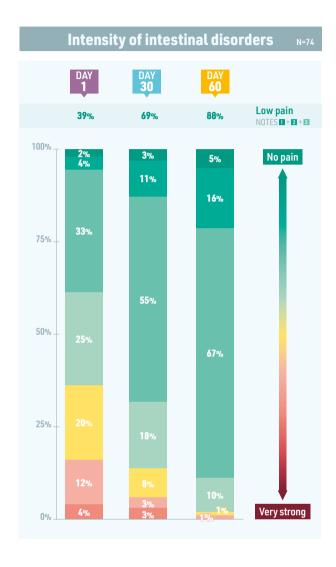


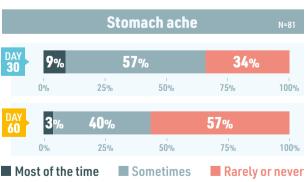
After 30 days, the frequency of intestinal disorders decreases, and it keeps decreasing after 2 months.



After 30 days of use, we observe a global **significant reduction** of the intensity of intestinal pain.

During the second month, the intensity of this pain keeps decreasing.





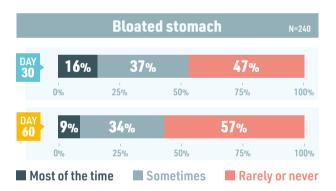
With a daily intake of only 10 grams of acacia gum, which is the lowest dosage of the study, there is a decrease in stomach ache.

There is a significant reduction of the frequency of stomach aches thanks to the intake of acacia gum.

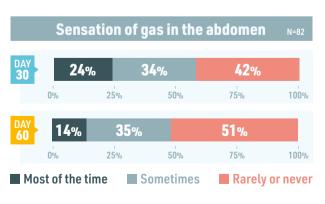
After 60 days, **88%** of consumers declare having low pain. The intensity of intestinal disorders **significantly decreases** at the end of the testing period.

Only 1% of consumers declare having "strong pain", although 16% of consumers initially declared having strong intestinal pain.



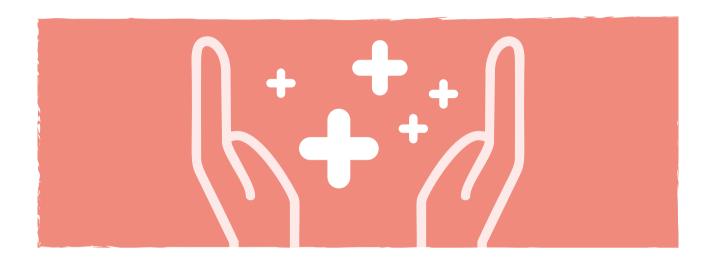


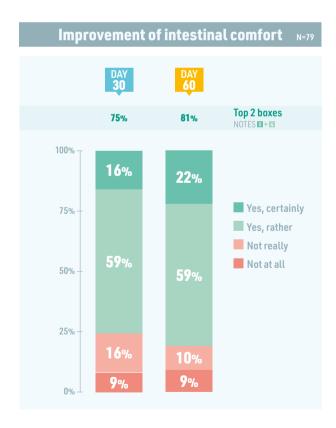
After 60 days, 91% of consumers declare only having a bloated stomach "sometimes", "rarely or never".

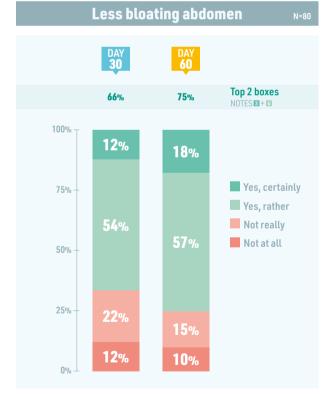


After 60 days, 85% of consumers only have sensation of gas "sometimes", "rarely or never".

Perceived efficiency & benefits





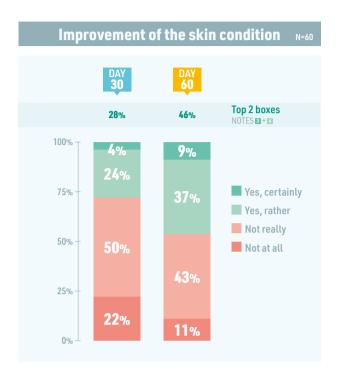


More than 7 people in 10 have perceived an improvement of their intestinal comfort after 1 month.

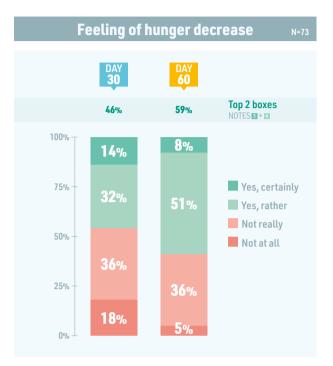
More than 8 people in 10 have perceived an improvement of their intestinal comfort after 2 months.

More than 65% of users noticed that their abdomen is less bloated after 1 month.

75% of users noticed that their belly is less bloated after 2 months.







After 30 days of treatment, 46% of users perceive a reduction of their feeling of hunger.

After $60 \, \text{days}$, $6 \, \text{users}$ in $10 \, \text{perceive}$ a reduction of their feeling of hunger.

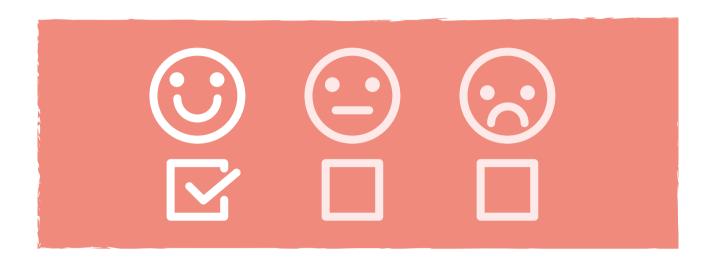


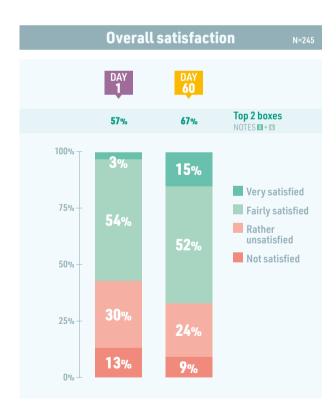
The perceived efficiency and benefits from the intake of acacia gum suggest that acacia gum provides improvement of intestinal comfort and thus digestive wellness.

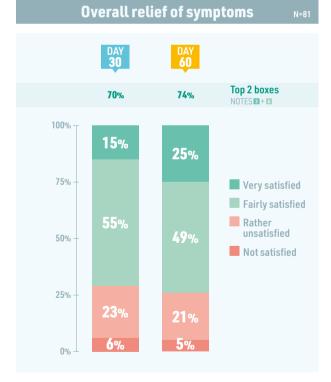
As science continues to unveil the expansive role the gut plays in overall health, our study also suggests that a healthy gut is favorable to other health areas, and that acacia gum may play a role in areas such as skin and appetite.



Satisfaction





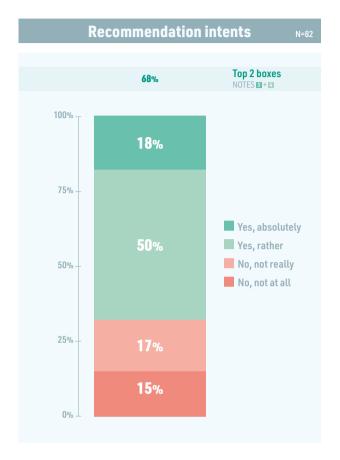


After 60 days of daily intake of acacia gum, 67% of consumers are satisfied by the benefits of acacia gum on their gut health.

Score of satisfaction **significantly increases** between day 1 and day 60, going from 57% to 67%.

More than 70% of consumers are satisfied by the relief of their intestinal discomfort.

Between the 1st and the 2nd month of intake, satisfaction increases concerning the efficacy to relief symptoms.



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68% of consumers would recommend a daily intake of acacia gum for gut health.

Impact of acacia gum on consumers' daily life



70 % OF CONSUMERS say the intake of acacia gum improves their quality of life



78 % OF CONSUMERS
say acacia gum has a beneficial effect
on their health



78 % of consumers
say acacia gum allowed them to be able
to put up with pain and discomfort



70 % OF CONSUMERS say acacia gum made their state of health more acceptable



68 % OF CONSUMERS say acacia gum helped them feel physical pain less frequently







OUR PRODUCTS CERTIFICATIONS







Our products are halal and kosher certified, more information upon request.

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