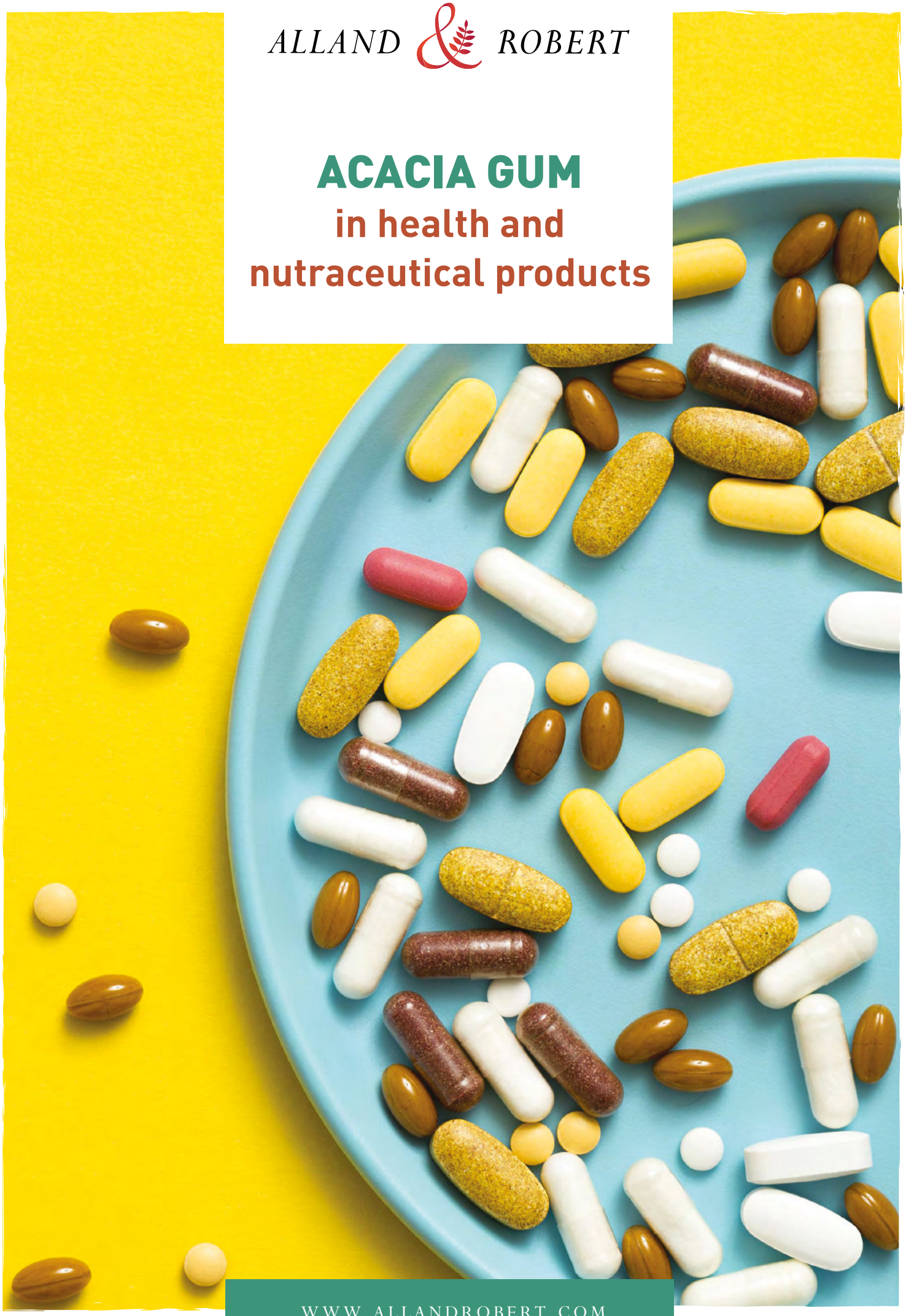
ALLAND & ROBERT

ACACIA GUM

in health and nutraceutical products



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1/ ACACIA GUM

Natural & Organic

Vegetal

Clean Label

An exudate of African acacia tree

Sustainable

A soluble prebiotic fiber



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. Acacia gum is easy to use: heat is not required to activate its functionalities, and it has a low viscosity while being highly compatible with many other ingredients and processing conditions.

CAS: **9000-01-5**
EINECS: **232-519-5**
G.R.A.S. status: **CFR 184.1330**
Customs Code: **1301.20.00**

LABELLING ACACIA:

- ✔ Acacia gum / Gum acacia
- ✔ Gum Arabic
- ✔ Acacia fiber
- ✔ E414

Low FODMAP

Acacia gum is a low FODMAP ingredient which means it is particularly ideal for people with irritable bowel syndrome.

FODMAP stands for Fermentable Oligosaccharides, Disaccharides, Monosaccharides And Polyols: these short chain carbohydrates are poorly absorbed in the small intestine and can ferment in the colon, causing digestive discomforts and issues in some people.

2/ REGULATIONS & CERTIFICATIONS

Food safety

According to the EFSA (European Food Safety Authority), or the JECFA (Joint FAO/WHO Expert Committee on Food Additives), there is no safety concern and no need for a numerical ADI (Acceptable Daily Intake) for acacia gum.

Pharmaceutical safety

Acacia gum is compliant with the French National Agency for Medicine Safety (NAMS). As a supplier of excipients and active ingredients, Alland & Robert is regularly inspected by the NAMS in order to define and ensure the implementation of the enforceable regulatory frame works, based on two referentials: GMP (Good Manufacturing Practices) Part II and IPEC (International Pharmaceutical Excipients Council).

ACACIA GUM, NOW FDA APPROVED AS A DIETARY FIBER!

In the United States, the dietary fiber status of acacia gum has been approved by the FDA in December 2021. Acacia can now be classified as a fiber for nutrition labelling purposes.

In Europe, acacia gum is recognized as a fiber. Nutrition claims are applicable for acacia gum depending on the dosage*: **"source of fiber"** or **"high in fiber".**

Acacia gum meets demanding criteria

High quality & sustainability

Sedex MEMBER

CDP MEMBER

SILVER 2021 ecovadis Sustainability Rating



* Nutritional allegations can vary according to dosage and the legislation of the country and must always be checked.

3/ HEALTH APPLICATIONS

Acacia gum, a multifunctional excipient

Acacia gum is used for tabletting, coating and texturing pills, capsules and tablets in health products.

PROPERTIES
- Fiber
- Coating, film forming & encapsulation agent
- Suspending agent
- Texturing agent
- Bulking agent for direct or powder compression
- Stabilizer for colloidal systems
- Emulsifier in Oil in Water (or water-based) emulsions
- Natural adhesive
- Non-cariogenic properties
- Digestive health & functional

APPLICATIONS
- Tablets, pills, capsules
- Insoluble drugs
- Sugar-free medicines
- Micro-granules
- Pectoral pastes
- Lotions and syrups
- Gummies
- Dental products
- Clinical Nutrition
- Liquid formulas



SUGAR-FREE COATING WITH POLYOLS

INGREDIENTS
- Acacia gum 381 A or I
- Polyol(s) (sorbitol, xylitol...)
- Water, flavors, colors

MANUFACTURING PARAMETERS
Gumming performed with a pure acacia syrup.
Coating realized with a blend of acacia gum with polyols, and flavors.

ADDITIONAL INFORMATION
- Coating layer by layer to obtain a very thin crystallization
- Last polishing operation made with a solution of acacia gum

PILLS COATING

Gumming operation performed with a solution of acacia gum smoothes the surface and creates a tight and effective barrier in order to prevent migration from the center to the coating that would create instability. Gumming also allows a better fixation of the coating blend. For gumming, pure acacia gum or a blend of acacia gum and sucrose syrup around 65° Brix are widely used.

For coating enlargement, the addition of acacia gum in the syrup can also avoid washing of centers and make the coating faster and more effective.

III/HEALTH APPLICATIONS

Acacia gum, a safe and active ingredient

HERBAL OR FRUIT GUMMIES
A formulation that combines 20 to 40 % of acacia senegal gum, sucrose and glucose leads to a unique texture both firm and melting, providing a satisfying sensory experience. Acacia gum also increases the fiber content and favors a nice flavor release.

The use of acacia senegal grades is mandatory to keep the shape of gummies and avoid stickiness during storage. Acacia gum also presents a technological function avoiding crystallization of sucrose when syrups and blends are close to saturation during processing. Anticrystallization effects is also of great interest to improve stability and texture during shelf life.

SUGAR-FREE SOFT GUMS
Formulated with acacia senegal gum, sugar and glucose have been replaced by polyols syrups leading to very interesting and nice soft texture well appreciated by all people including children. Non cariogenic properties of acacia gum combined to the absence of sugar make these candies tooth friendly.



TABLETTING BY DIRECT COMPRESSION

Acacia gum provides agglomerating and cohesive properties, in addition to being non cariogenic and having low calorific value. It is an alternative to hydroxypropyl cellulose, starch, maltodextrines and sorbitol.

Acacia gum helps creating a very strong and compact structure.

GUM DROP TEXTURING

INGREDIENTS
- Gum acacia 396 I or A
- Sugar (sucrose)
- Glucose syrup 42 DE
- Water
- Citric acid (50 % aqueous solution)
- Flavoring and coloring

MANUFACTURING PARAMETERS
- Cooking system: Jet Cooker
- DM before cooker: 72° Bx
- DM after cooker: 69° Bx
- Drying temperature: 60° C
- Structure: Long
- Texture: Hard

MANUFACTURING PROCESS
1/ Premix acacia gum, sugar and glucose. Hold at 60° C.
2/ Pump the mass to the Jet Cooker (cooking temperature: 104–106 °C).
3/ Inject the flavors, colors and citric acid.
4/ Deposit in dry starch and place the starch trays in a ventilated room until required texture (40–60 hours) and end moisture (approx. 13-15 %).
5/ Unmould the drops, eliminate the starch and sand with fine sugar.

4 NUTRACEUTICALS APPLICATIONS

Acacia gum, the prebiotic fiber with functional properties

Acacia gum belongs to the group of dietary fibers with high intestinal tolerance and prebiotic effect. Acacia gum is allergen-free and GMO-free, and it does not present other fibers usual disadvantages such as discomfort, side effects, unnatural synthetic additive or viscosity addition to the end product. In addition, it is very low in calories and helps decrease the glycemic index of food products.



BENEFITS

- Multifunctional properties including flavor carrier, texturing and film-forming agent
- Resistance to acidity and heat
- No side effect
- Scientifically proven prebiotic effect
- Positive impact on gut health
- Neutral taste with very low viscosity
- Low calorific value that is ideal for dietary use
- pH compatible with milk proteins
- Positive effect on rheology

APPLICATIONS

- Gummies
- Powdered mixes
- Tablets, pills, capsules
- Functional products



Alland & Robert offers a specific range of Acacia gum called Acacia Fibre, which guarantees a minimum of 90 % fiber content (international method AOAC 985-29).

5 THE BENEFITS OF ACACIA GUM ON GUT HEALTH

Alland & Robert conducted an exclusive study on the role played by acacia gum on the gut health & digestive wellness

For more details, the results of our study can be requested at:



Our study

- **240 PARTICIPANTS declaring to suffer from intestinal disorders regularly** and in the last month such as stomach aches, bloating, flatulence, accelerated or slowed down transit.
- **3 GROUPS with 3 different dosages of organic acacia gum,** starting from 10 grams. Participants took powdered acacia gum at breakfast.
- **EVALUATION of the impact of symptoms,** daily life and satisfaction after 30 and 60 days of daily use.

The results

MORE THAN 8 PEOPLE IN 10
have perceived an **improvement of their intestinal comfort** after 2 months.

88 %
of consumers declare to have **low intestinal pain** after 60 days.

75 %
of consumers perceived a **less swollen belly** after 60 days.

78 %
of consumers say the intake of acacia gum has a **beneficial effect on their health.**

MORE THAN 70 %
of consumers felt an **improvement of their intestinal comfort** after 1 month.

MORE THAN 65 %
of consumers felt a **diminution of their stomach ache** after 60 days.

70 %
of consumers say the intake of acacia gum **improves their quality of life.**

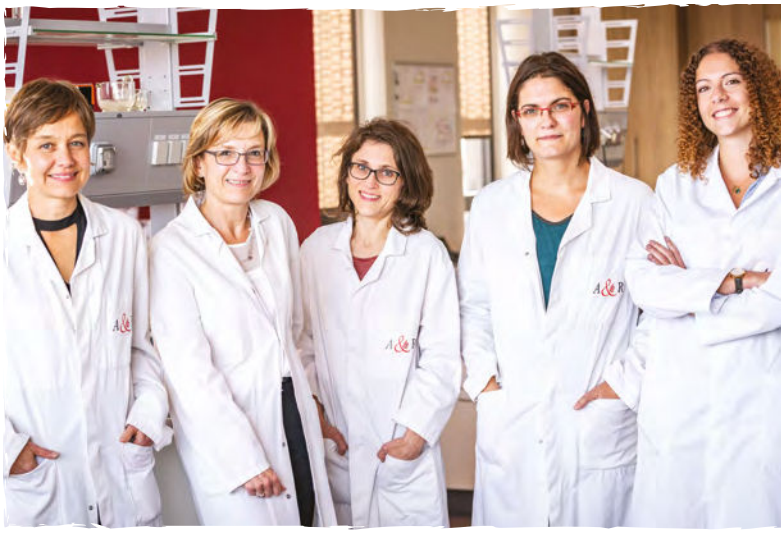
68 %
of participants would **recommend a daily intake of acacia gum** for digestive wellness.

ALLAND & ROBERT

We are your expert of acacia gum.

Created in 1884, Alland & Robert is a family company and a leader in tree exudates, with a strong focus on acacia gum. Alland & Robert's main focus is on customized R&D, customer service and partnerships with internationally recognized universities.

Alland & Robert exports to over 70 countries through a network of 40 distributors. With the aim of providing high-quality natural gums, Alland & Robert is fully committed to sustainable growth in line with its active corporate social responsibility plan. This vision is supported by a large network of raw material suppliers in Africa, ethical sourcing and compliance with international certifications.



- R&D STRONG EXPERTISE
- INTERNATIONAL CERTIFICATIONS
- SUPPLIER NETWORK FOR SUPPLY SAFETY
- CUSTOMIZED CUSTOMER SERVICE
- CORPORATE RESPONSIBILITY
- INTEGRATED SUPPLY CHAIN

Ask us anything at: **info@allandetrobert.fr**

Discover more about us:

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