Facts, Figures & Tips For Diversity Of Fibers & Gut Microbiota

FIBER'S ACTION: GUT MICROBIOTA & TRANSIT

FOCUS

DANONE NUTRICIA RESEARCH

DIETARY FIBERS MATTER!

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Dietary fibers are carbohydrates from plant foods that are not degraded by digestive enzymes in the small intestine, thus reaching our large intestine intact. **Fiber consumption is associated with physiological effects: That's why we need to incorporate them in our diet.**

FOR OUR GUT MICROBIOTA

Some fibers can promote our **gut bacteria's growth and development.** Through **fermentation,** gut bacteria will degrade the fibers we eat and produce:

- **Short-chain fatty acids,** important metabolites that directly act on our health.
- Gas, which may result in transient digestive discomfort. But, no worries, our body just needs time to adjust!

EXAMPLE OF FIBERS ACTING ON GUT MICROBIOTA: pectin found in most fruits, vegetables, beta-glucans in wholegrains (oats and barley), inulin in chicory roots.

There are soluble and insoluble fibers. But to date, there is no consensus on the exact link between their solubility and their fermentability.

LARGE INSTESTINE HERE'S WHERE IT ALL HAPPENS

Fiber-rich foods typically contain **different types of fibers** and may support **different functions**

FOR OUR TRANSIT

Some fibers have the ability to **absorb water,** and swell in the large intestine, increasing stool weight in the process. This **fecal bulking effect** plays a role in our transit by supporting **regular bowel movement.**

EXAMPLE OF FIBERS ACTING ON TRANSIT: lignin and cellulose, found in seeds, nuts, cruciferous vegetables (brussels sprouts, cauliflower, cabbage).

Dietary fibers may also play a role in other functions like **glucose and lipid metabolisms**, or **appetite regulation**...

ALL ACTORS OF OUR OWN HEALTH

Through a **diversified fiber-rich diet** and maybe some **fiber-enriched products** we can support the functioning of these two physiological effects.

Academy of Nutrition and Dietetics, 2015; Holscher, 2017; Williams et al, 2017