Upcycled ingredients with technofunctional, nutritional and health benefits November 2024



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UPCYCLING? I beg your pardon?





Upcycled ingredients...

... are derived from sources intended for human consumption

... are made from parts that are not consumed for practical, cultural, or physiological reasons

... are healthy and safe

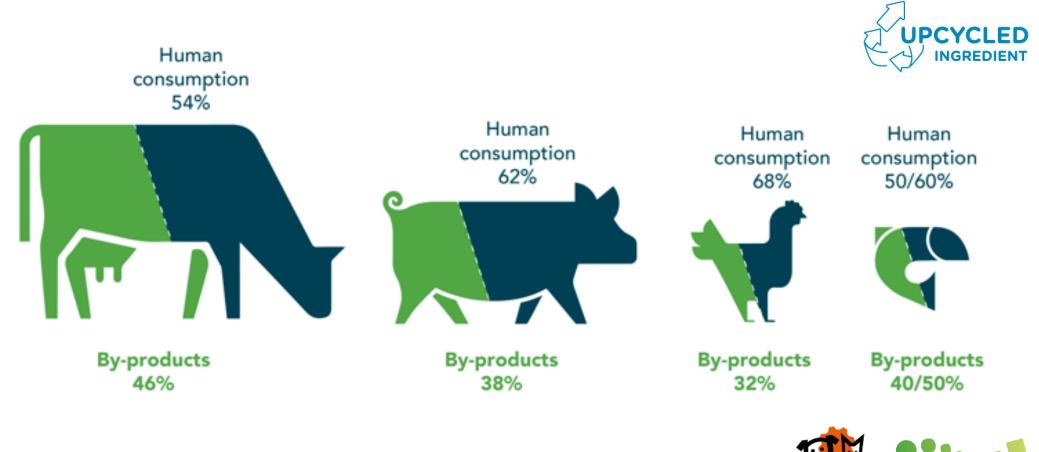
... provide added value for products and customers



"Upcycling" is the upgrade to "recycling"



Pet foods are ideal for upcycling animal byproducts!





Source: INEC report "l'Industrie des coproduits animaux", 2020 PET

Consumers are discovering the UPCYCLING concept!



of consumers find upcycled ingredients appealing

Sources: FMCG Gurus (August 2023)



As an example...

Real-life Facebook example (31/10/2023)

1





...

Stine Ekeberg

I think it's great that all of the animal is used.

- 5d Vind ik leuk Beantwoorden
- → 186 antwoorden

Andrew Wilson

I'm glad to see that we have found uses for the whole of the animal pretty much. Now if we can figure out how to stop wasting it in other ways.

Frederik Vaillancourt Stine Ekeberg it is. I'm carnevorous but not into killing animals for nothing so the no waste treating of the carcass is cool to see

4d Vind Beantwoorden ik leuk



Kat Wells 1 w Vind ik let

Well at least as many parts of the animal that can be used, are being used rather than going to waste. 🔬

1 w Vind ik leuk Beantwoorden 186



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Source: Facebook

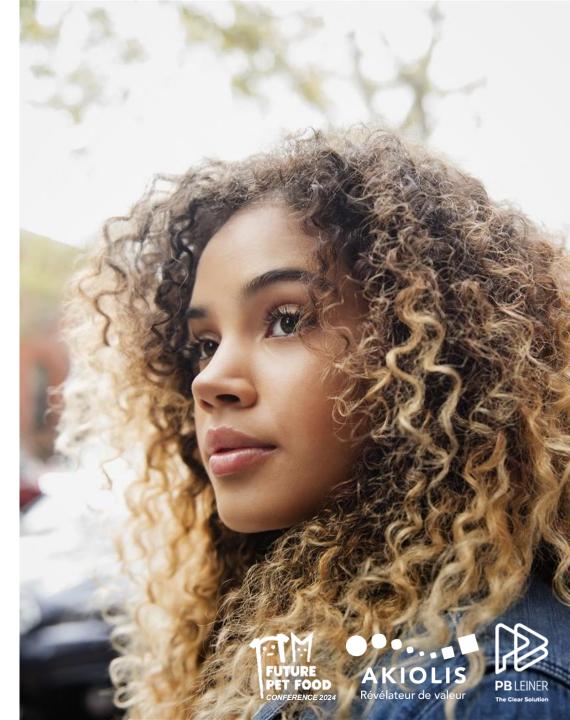
Upcycled concepts resonate strongest with the younger generations

5400 of people aged 25 54 years old find a product with upcycled ingredients MORE

of people aged 25-34 years **APPEALING than other** products

of people aged 18-34 50000 billing and to be that upcycled ingredients are BETTER IN **QUALITY** than regular ingredients

Sources: FMCG Gurus (August 2023); Innova Trends Survey 2023



So... has the time come to introduce upcycling in pet food?





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YOU'RE THE EXPERTS!

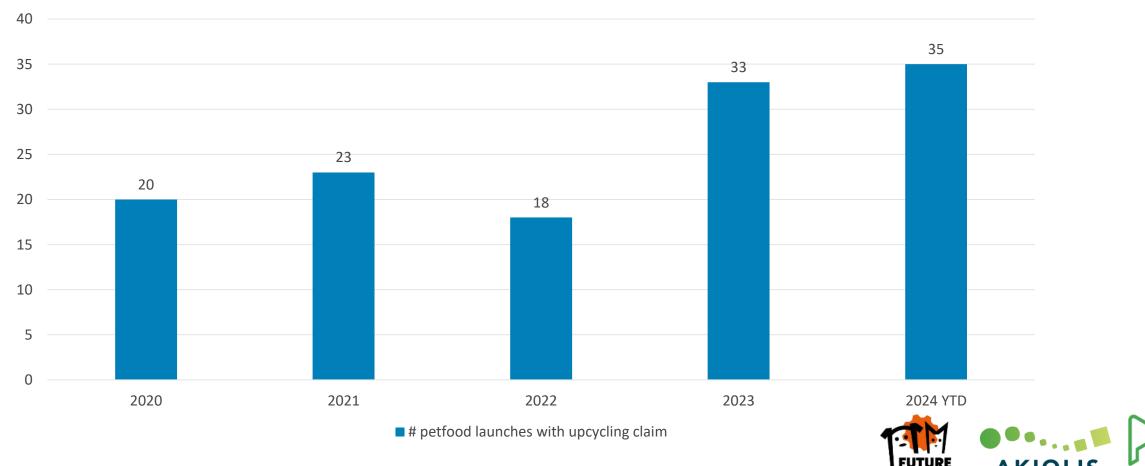


What is new is having the opportunity to talk about upcycling!



The pet food industry is starting to pick up, but there is still a huge opportunity out there!

New pet food product launches WITH UPCYCLED CLAIM, globally



Sources: INNOVA Product Launch database

PET FOOD

Révélateur de valeur

The petfood industry is starting to pick up, but there is still a huge opportunity out there!

40 1.2% 35 35 33 1.0% 30 0.8% 25 23 20 20 0.6% 18 15 0.4% 10 0.2% 5 0.0% 0 2020 2021 2022 2023 2024 YTD -----Share of total # petfood launches # petfood launches with upcycling claim

New pet food product launches WITH UPCYCLED CLAIM, globally



Sources: INNOVA Product Launch database

99%

of pet food launches do NOT YET communicate on upcycling!



CUSTONIZATION and health benefits in pet foods

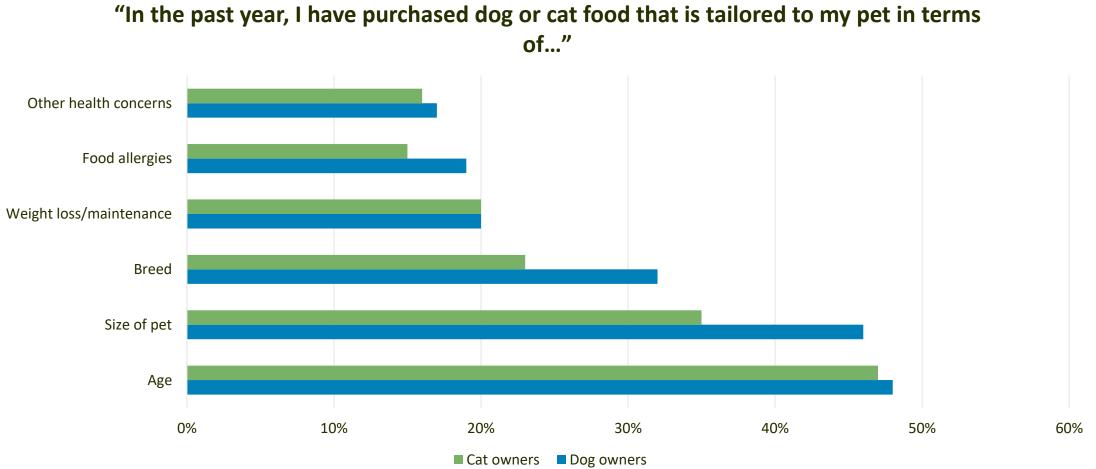




The "one food fits all" is challenged on a daily basis!



Customized pet foods: the holy grail of pet owners





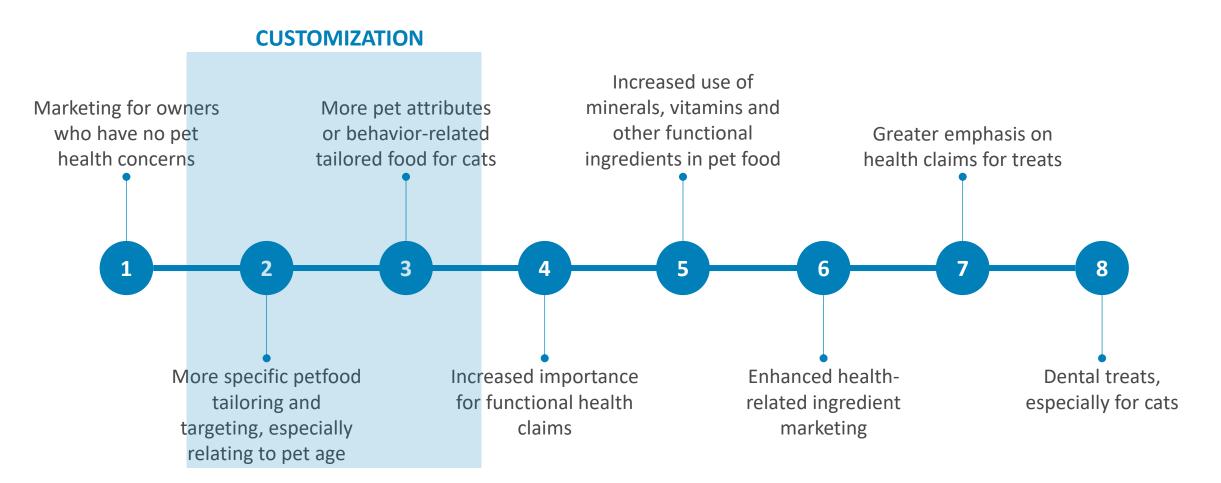
Sources: INNOVA Global Pet Ownership Survey 2024

Buying foods tailored to AGE and WEIGHT is well established...

... but owners are also buying foods tailored to their pet's BREED and HEALTH CONCERNS



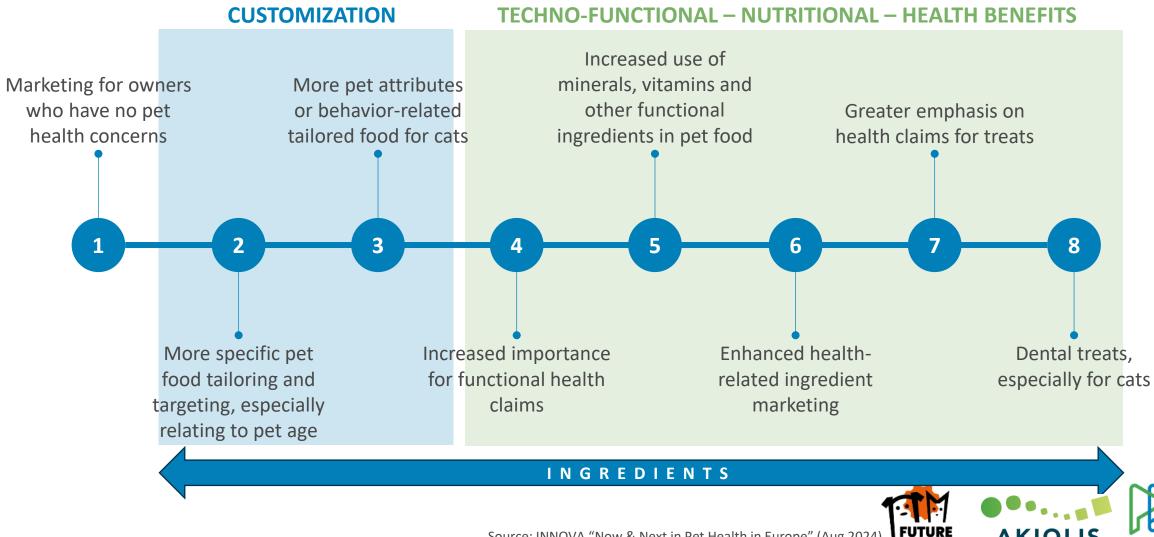
"What to watch out for?"





Source: INNOVA "Now & Next in Pet Health in Europe" (Aug 2024)

"What to watch out for?"



Source: INNOVA "Now & Next in Pet Health in Europe" (Aug 2024)

PET FOOD

Révélateur de valeur

So which nutritional and health benefits should we focus on?



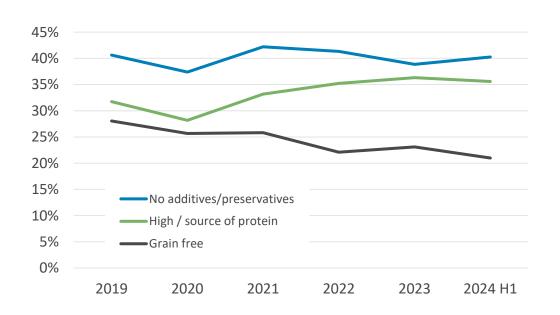
Health claims in pet foods

PASSIVE HEALTH CLAIMS

85% OF PET FOOD LAUNCHES IN WESTERN EUROPE, YTD

Top 3 PASSIVE health claims in pet food

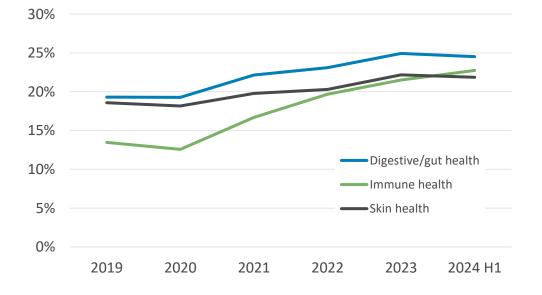
(% of total launches, globally)



ACTIVE HEALTH CLAIMS

59% OF PET FOOD LAUNCHES IN WESTERN EUROPE, YTD

Top 3 ACTIVE health claims in pet food (% of total launches, globally)





Sources: INNOVA product launches database

The right ingredients can help you capture these opportunities!

TECHNO-FUNCTIONAL NUTRITIONAL HEALTH BENEFITS UPCYCLING





Tessenderlo Group EVERY MOLECULE COUNTS

Bio-valorization segment





Our products: natural, top-quality, and upcycled!



RAW MATERIALS

Skins, hides, scales, bones, feathers, blood, viscera, lard, tallow



PROTEIN & FAT EXTRACTION

Protein solubilization Wet or dry cooking Hydrolysis Sterilization Fat separation Purification Drying Grinding UPCYCLED INGREDIENTS Flexible portfolio of product families!

> Mono-species proteins Mixed-species proteins Greaves Feather meals Blood products Fats Minerals Gelatin Collagen peptides



Ideal ingredients for superior quality pet food!





NUTRITIONAL

TECHNO-FUNCTIONAL

(ACTIVE) HEALTH BENEFITS



NUTRITIONAL



Energy boost absorption



Focus applications: wet, dry, and semi-moist foods



TECHNO-FUNCTIONAL



Moisture retention

Enhanced stability





Processing functionality





Adhesive properties

Oxidation defense

Focus applications: wet, dry, semi-moist foods, and cold extruded treats



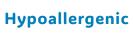


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HEALTH BENEFITS

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Bio availability







int Hea 8



 Focus applications: functional food supplements



Ideal ingredients for superior quality pet food!





NUTRITIONAL: proteins (incl. hydrolyzed) & fats



TECHNO-FUNCTIONAL: gelatin, protein solution binder



(ACTIVE) HEALTH BENEFITS:

collagen peptides

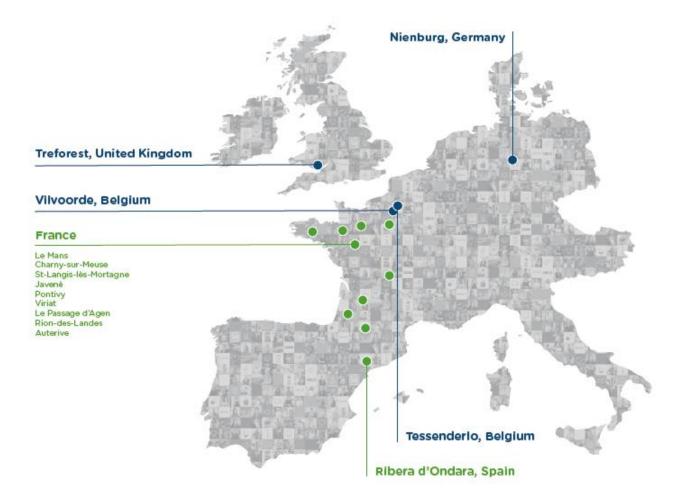




Where can you find us?



Right here in Europe...





... and all around the world...





The future of pet food is evolving - let's shape it together!

Visit us at our booth; Let us help to make your products stand out in this growing market!







www.akiolis.com | www.pbleiner.com | cindy.dekeyser@pbleiner.com

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