

FOOD DEUTENOMICS DATA

UNIVERSAL NANOMOTOR USER GUIDE

(empirical cutoff value – non-product related, non-medical assessments)



DEUTENOMICS OF FOOD

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We can work when ATPase is at work.

Deuterium content of nutrients determines the same of matrix water, produced by mitochondrial nanomotor related proton influx and oxygen, upon complete substrate oxidation in the Krebs-Szent-Györgyi cycle. ⚙️ ⚙️

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Nutrient deutenomics – is the basics of ATPase functions, mitochondrial health and quality of life.

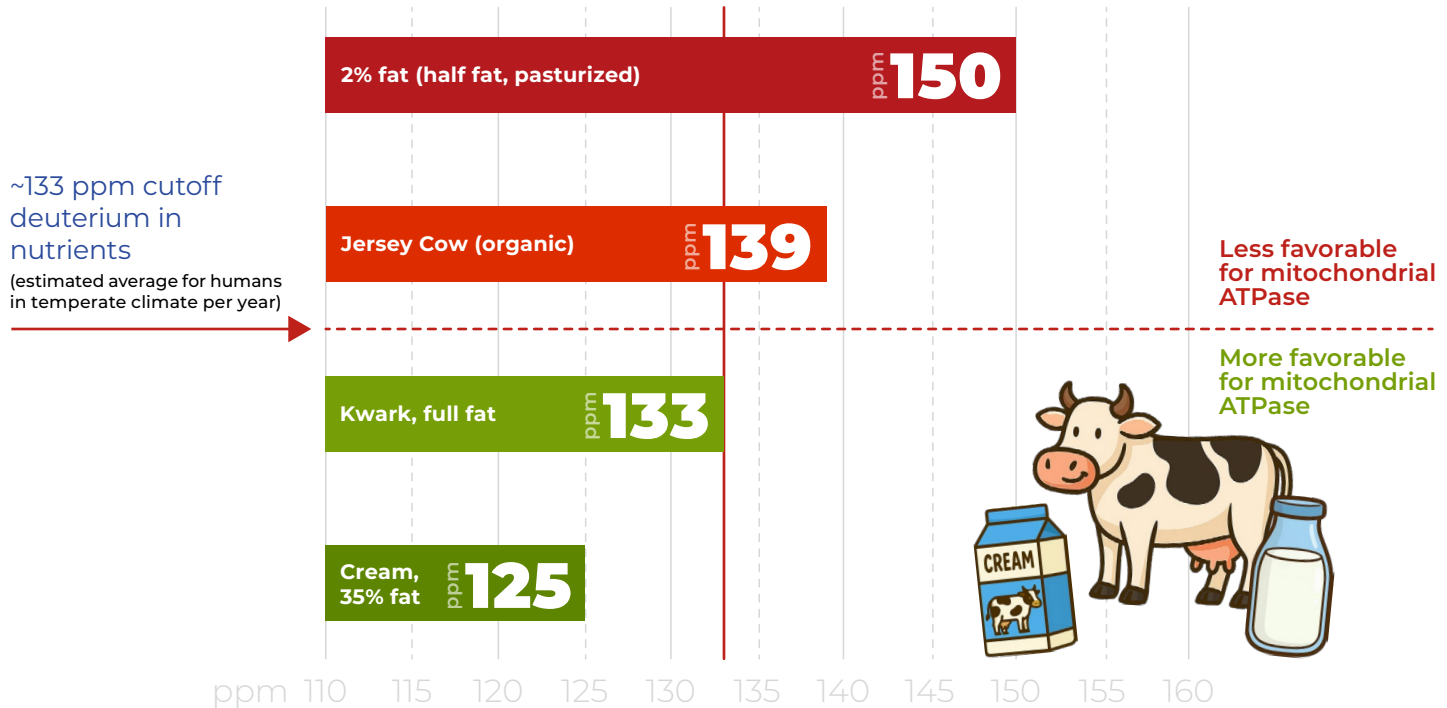
Nutrients profoundly influence mitochondrial ATPase functions and thus health as the prime source of deuterium during life.

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Deuterium content comparison IN COW MILK RELATED DAIRY

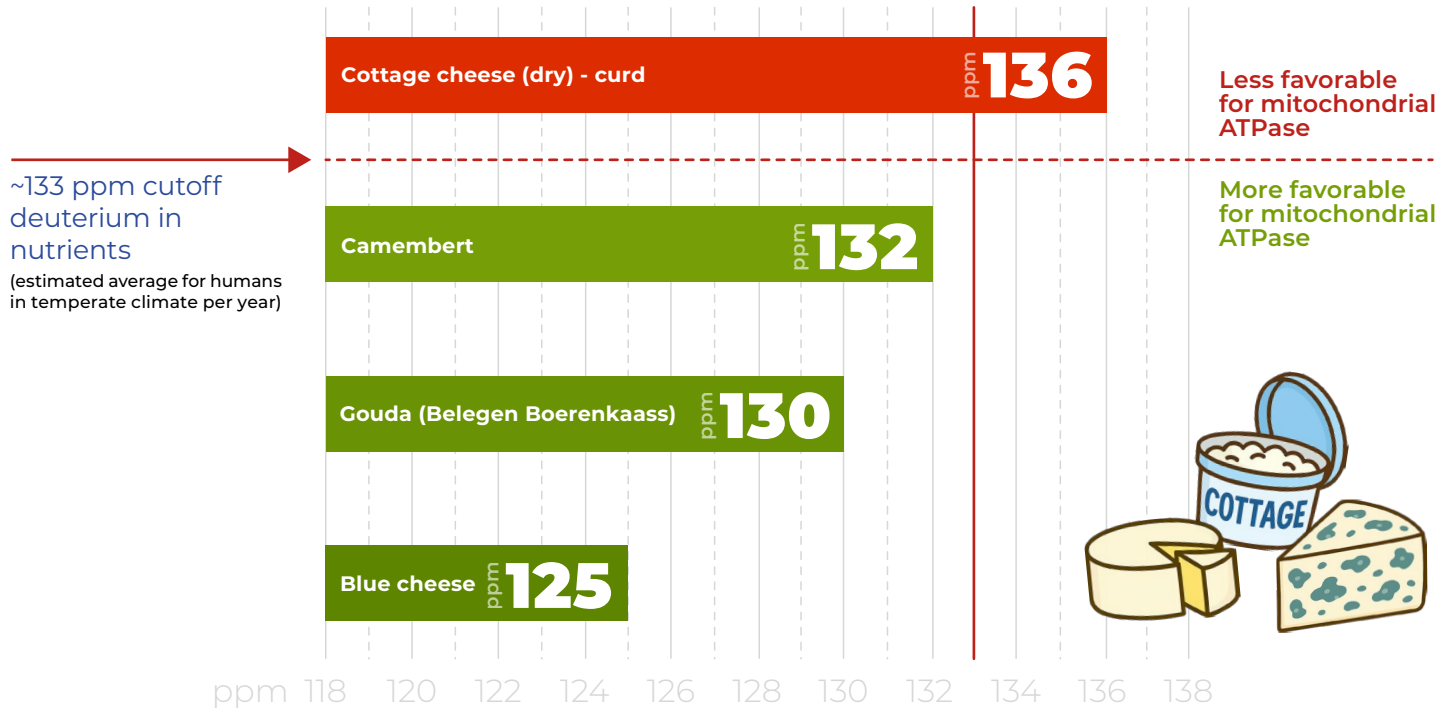


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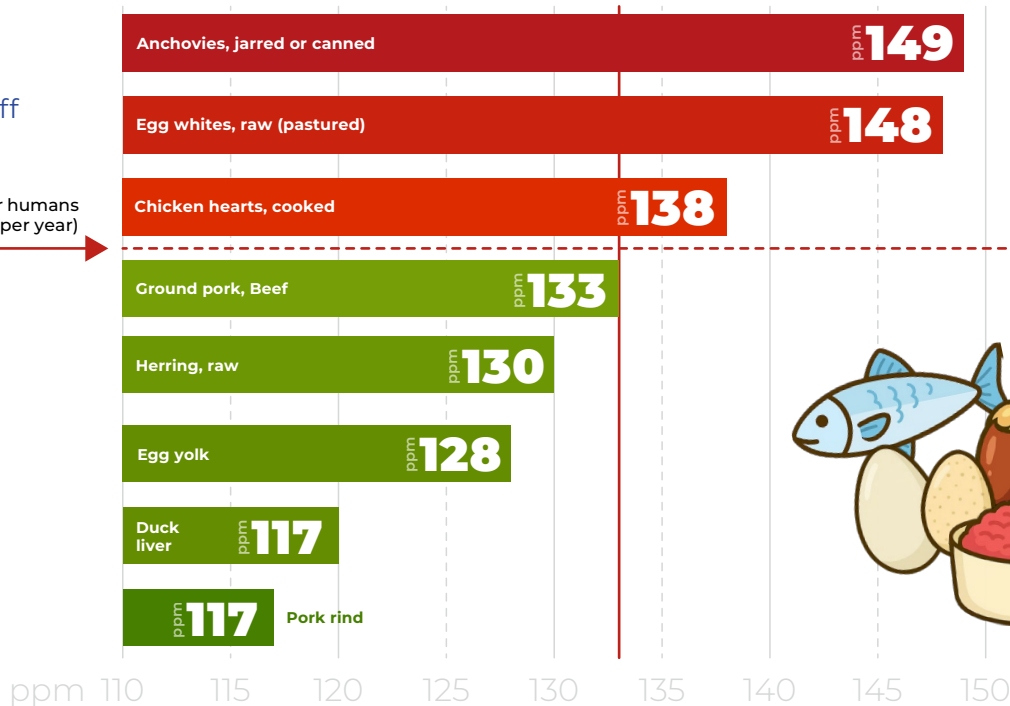
Deuterium content comparison IN CHEESES



Deuterium content comparison IN ANIMAL PROTEINS

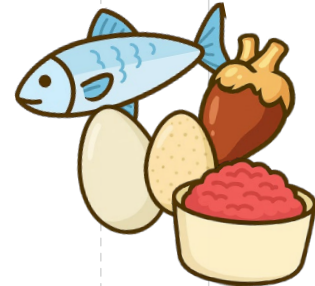
~133 ppm cutoff
deuterium in
nutrients

(estimated average for humans
in temperate climate per year)



Less favorable
for mitochondrial
ATPase

More favorable
for mitochondrial
ATPase



FOOD DEUTENOMICS DATA

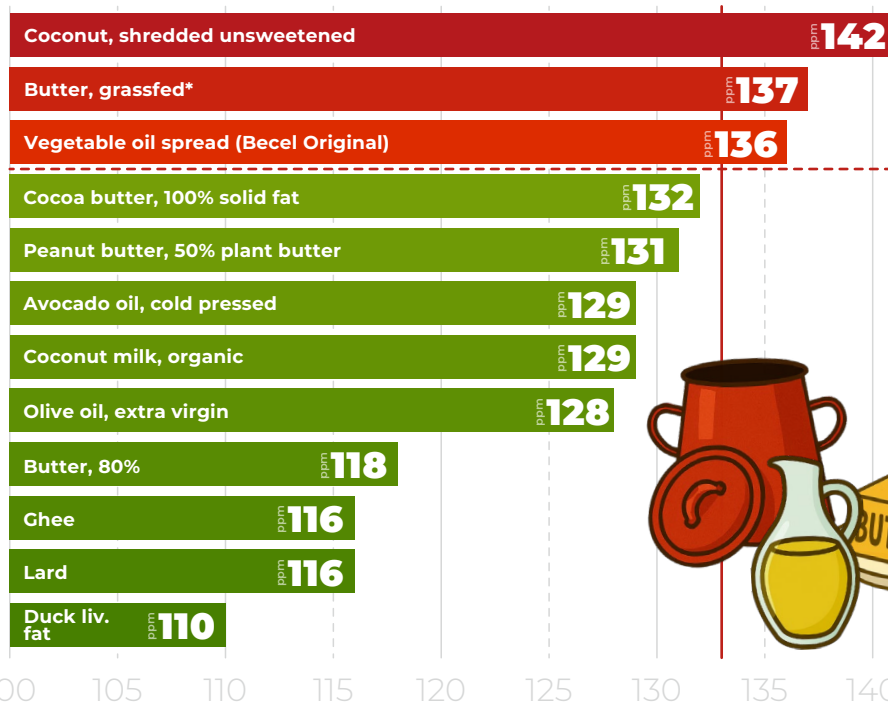
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Deuterium content comparison IN ANIMAL & PLANT: FAT & OIL SOURCE

~133 ppm cutoff
deuterium in
nutrients

(estimated average for humans
in temperate climate per year)



Less favorable
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ATPase

More favorable
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* Butter from the Netherlands
Cows eat non-fractionated
cultivated perennial ryegrass
below sea level in close vicinity

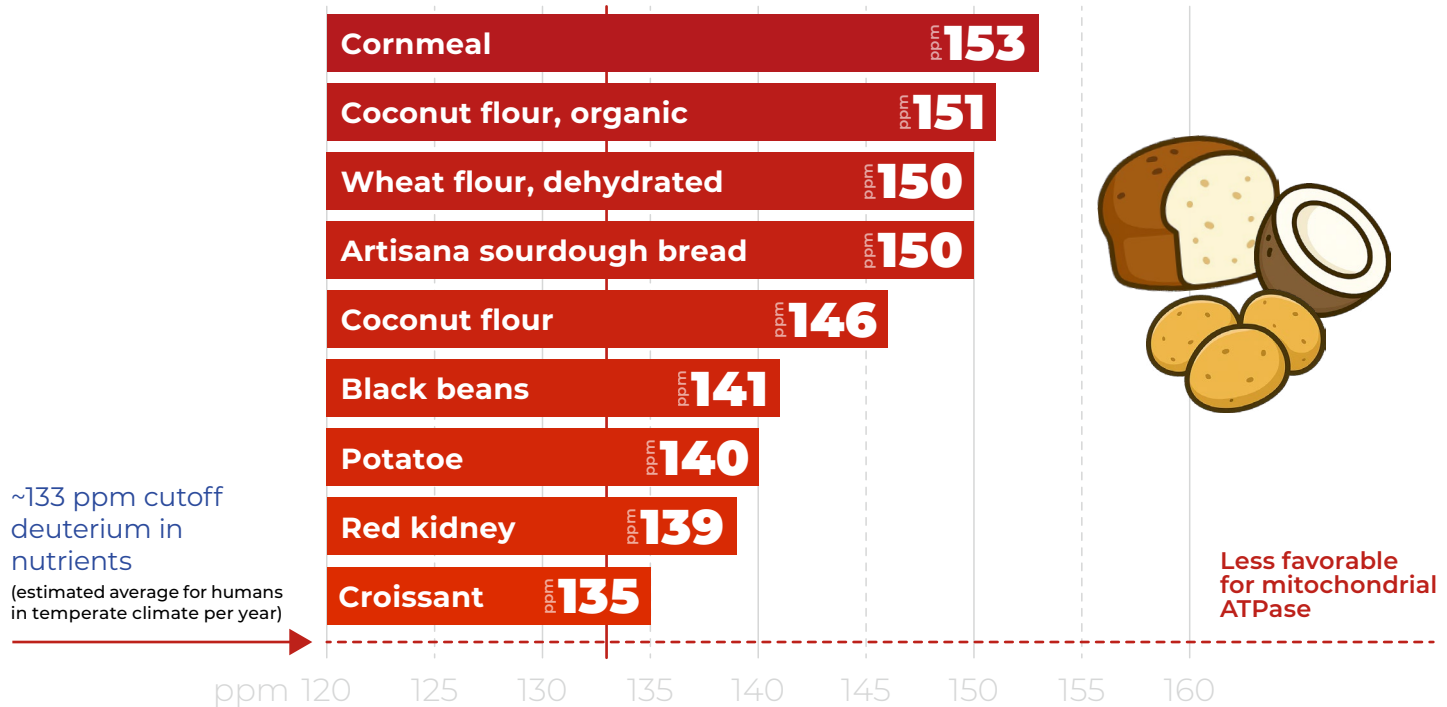


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Deuterium content comparison IN CARBS

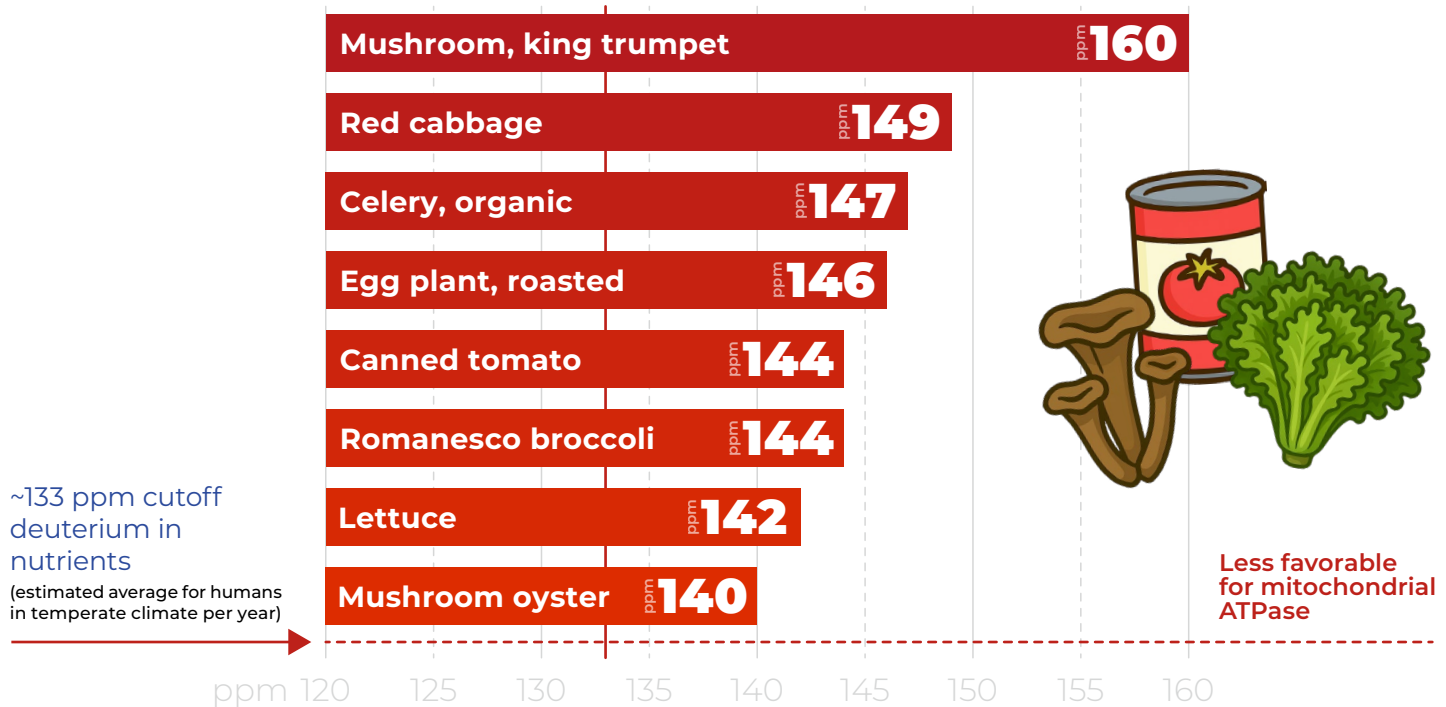


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Deuterium content comparison IN VEGETABLES

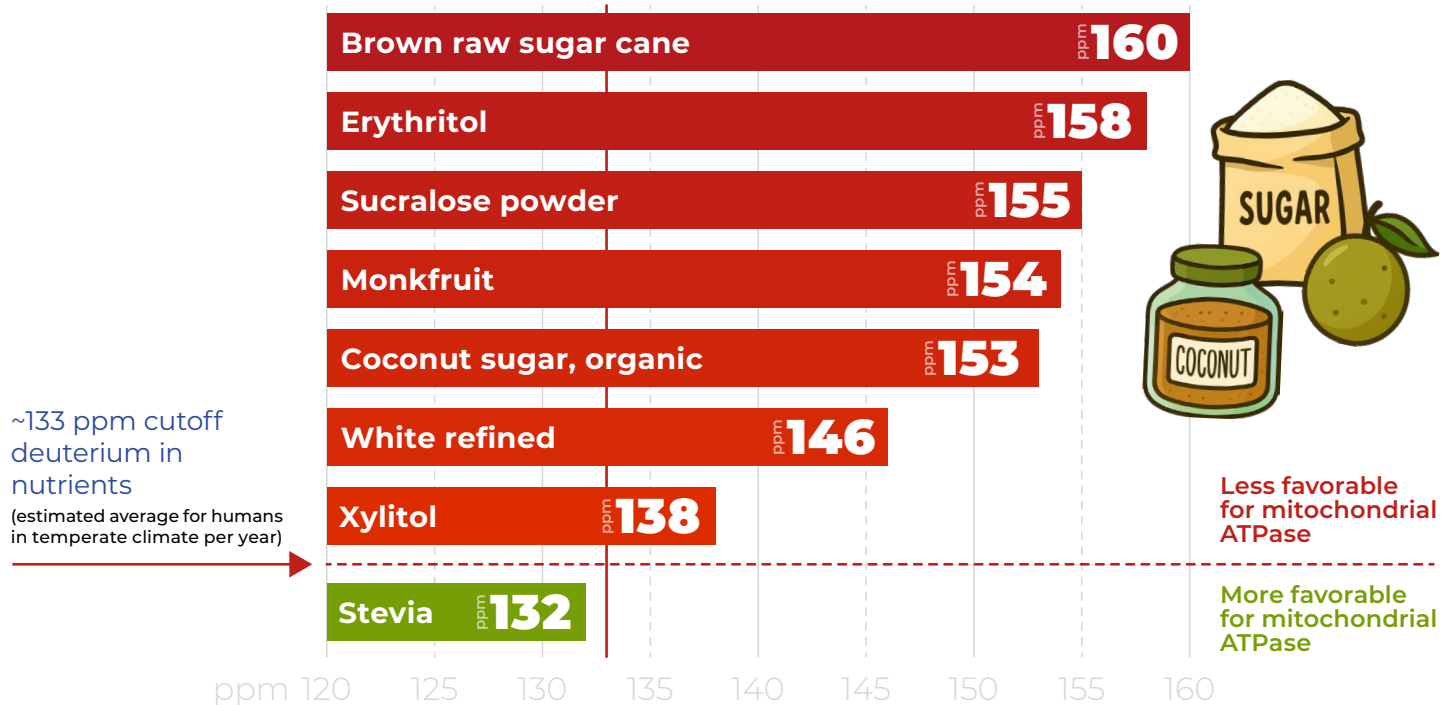


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Deuterium content comparison IN SUGARS

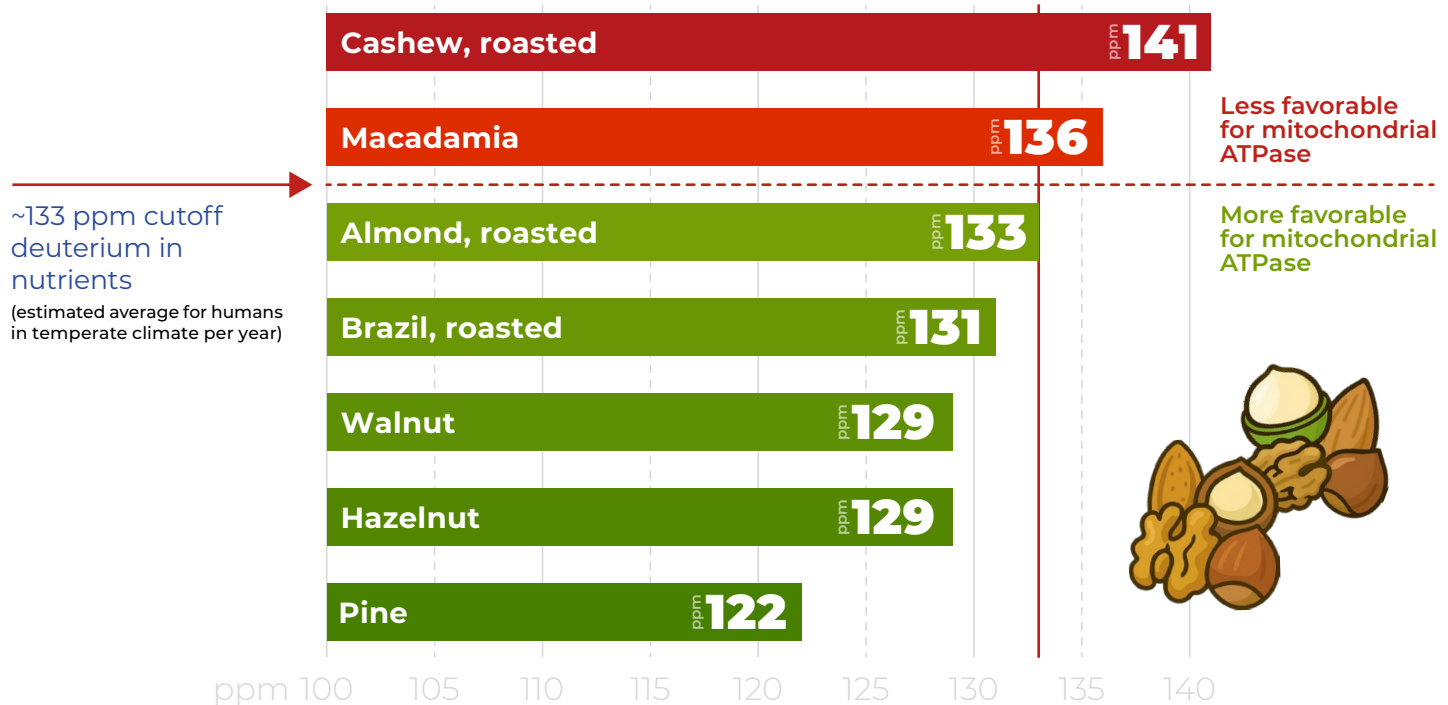


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Deuterium content comparison IN NUTS

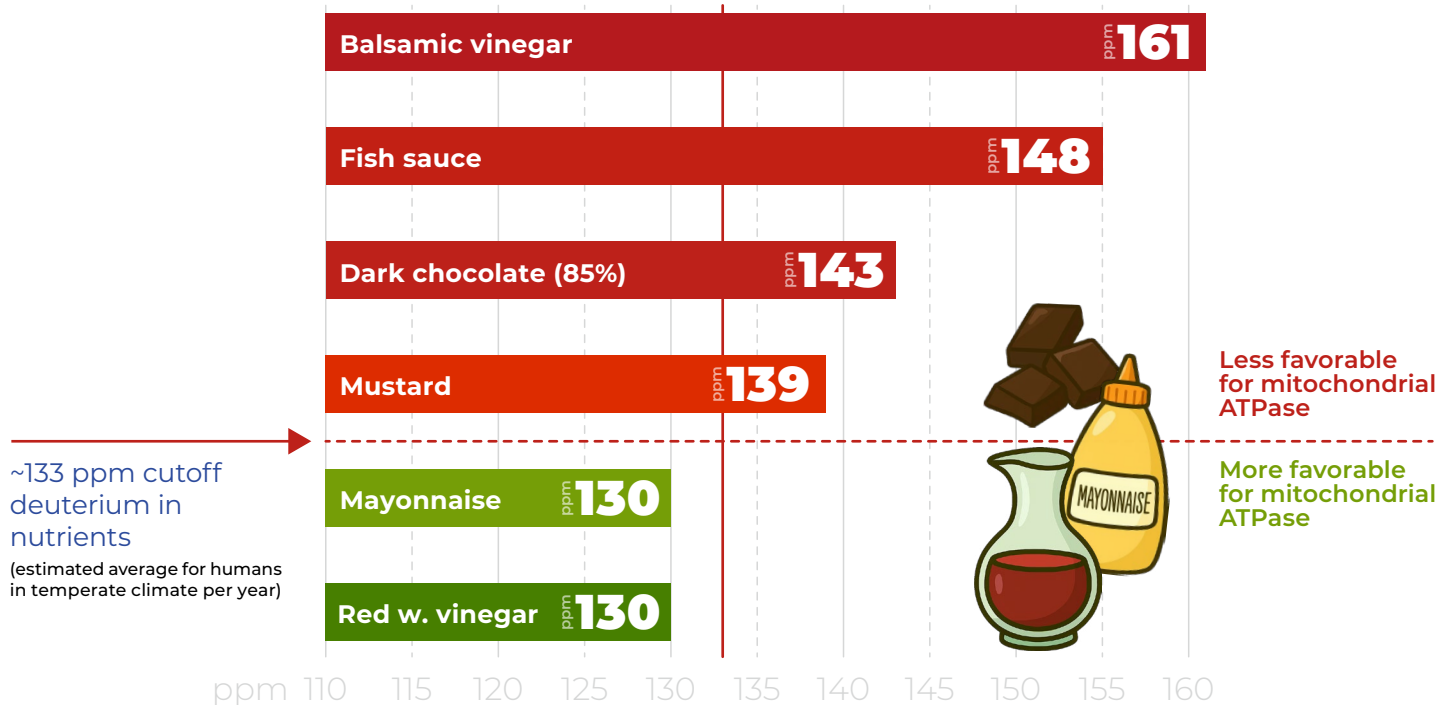


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Deuterium content comparison IN CONDIMENTS

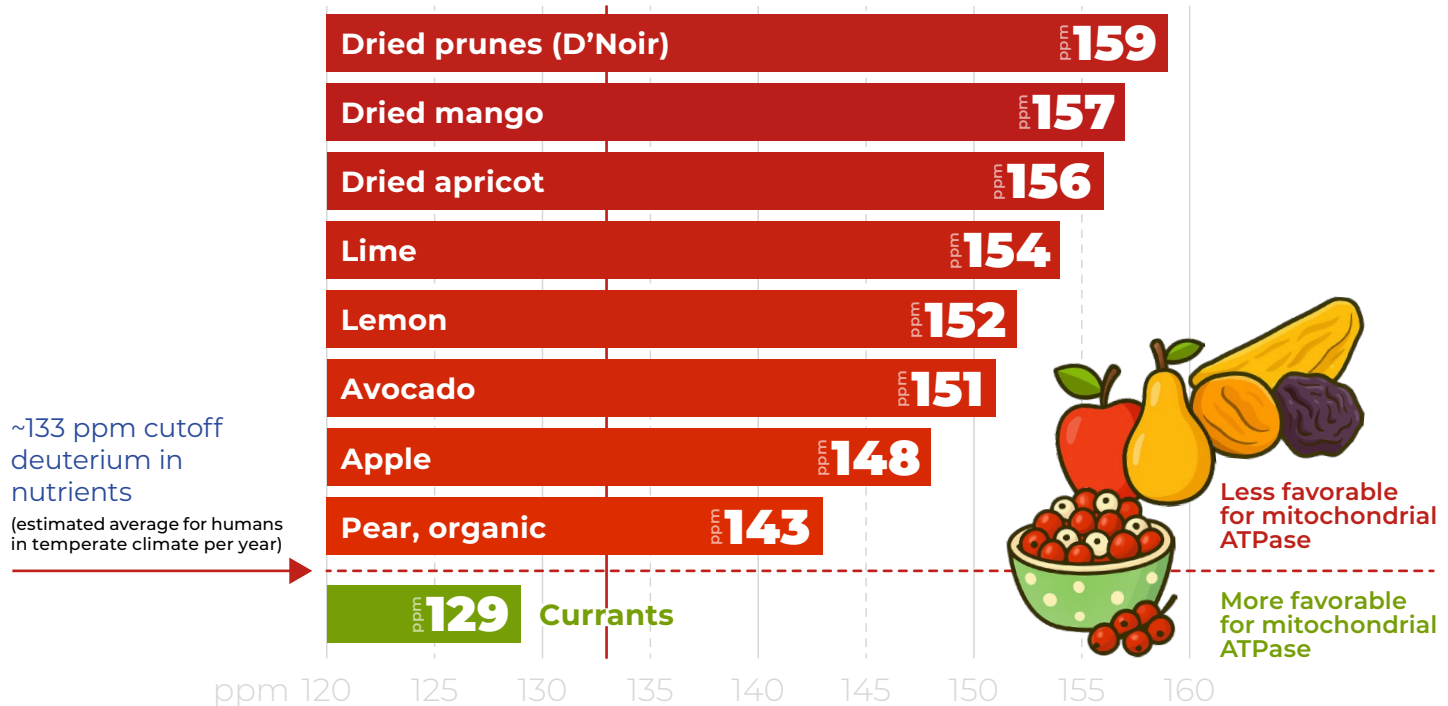


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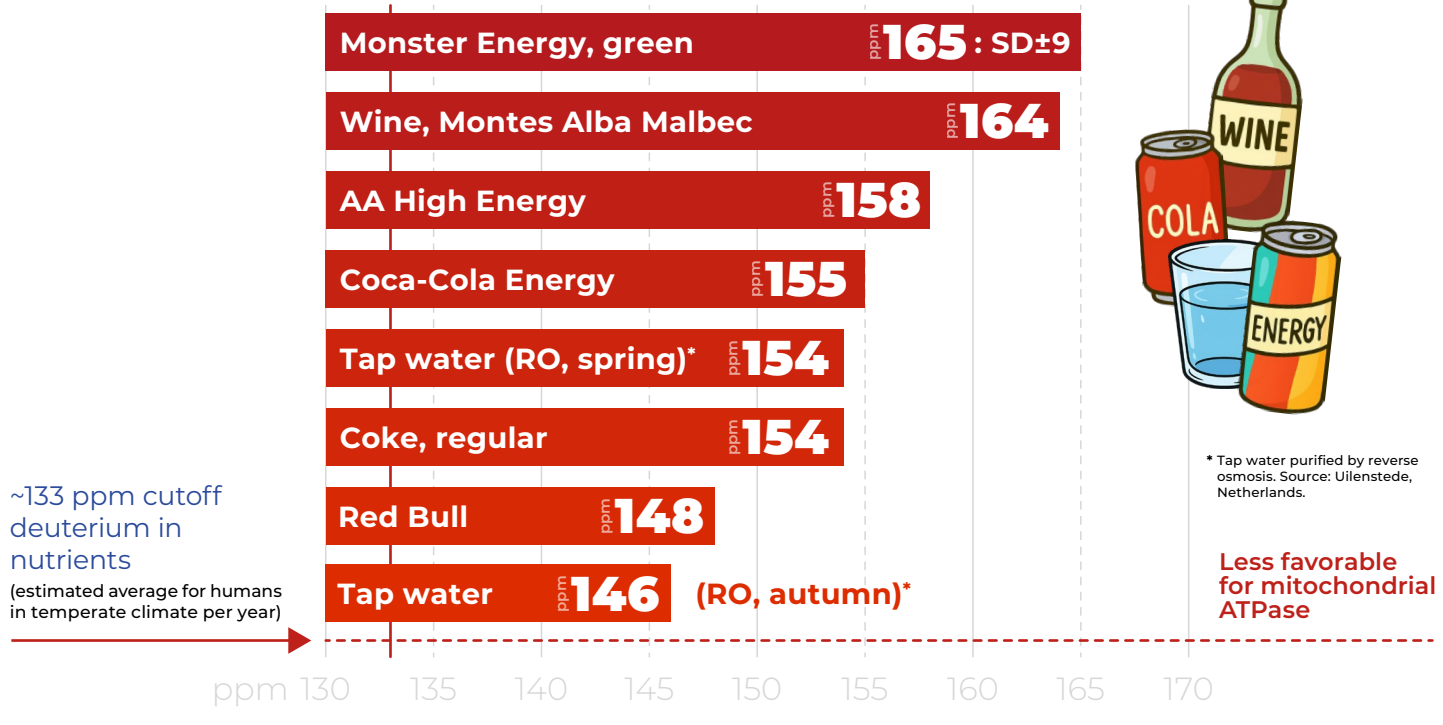
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Deuterium content comparison IN FRUITS: RAW & DRIED



Deuterium content comparison IN BEVERAGES

~133 ppm cutoff
deuterium in
nutrients
(estimated average for humans
in temperate climate per year)



* Tap water purified by reverse osmosis. Source: Uilenstede, Netherlands.

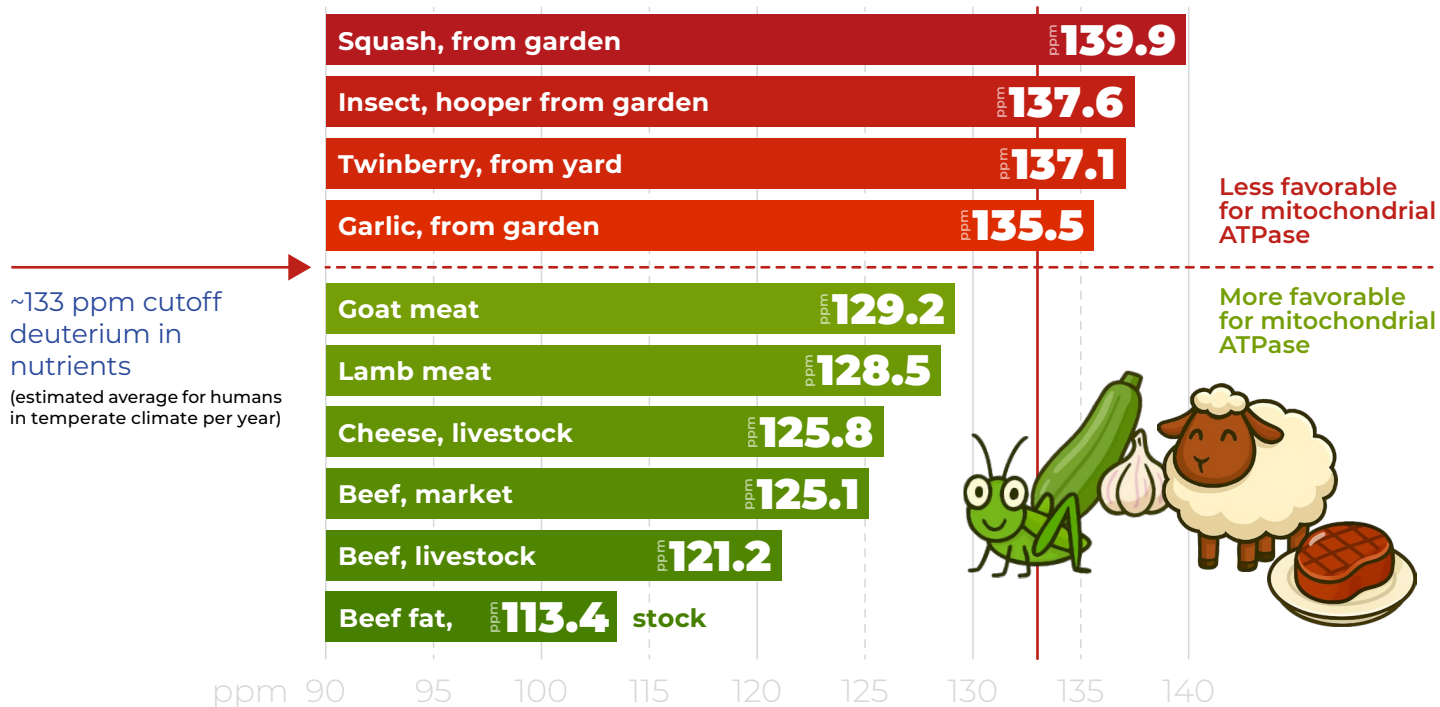
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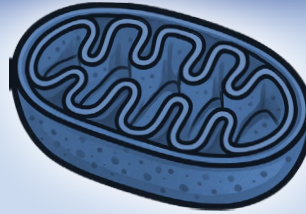
Deuterium content comparison IN A BRITISH COLUMBIA LIVING HABITAT (CANADA)



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TAKEHOME MESSAGE

Yearly average of deuterium intake, adjusted to geographical location, anthropological and microbiome related assessments, lifestyle and age may provide important guidelines to prevent and treat chronic diseases.

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METHODS

Deutenomics measurements were performed by James C. Lech at the Department of Physics and Astronomy, Physics of Living Systems, Vrije University Amsterdam, The Netherlands. (jameslech@gmail.com)

Dr. Anthony Chaffee: Deuterium Content Comparison in a British Columbia Living Habitat (Canada). 

