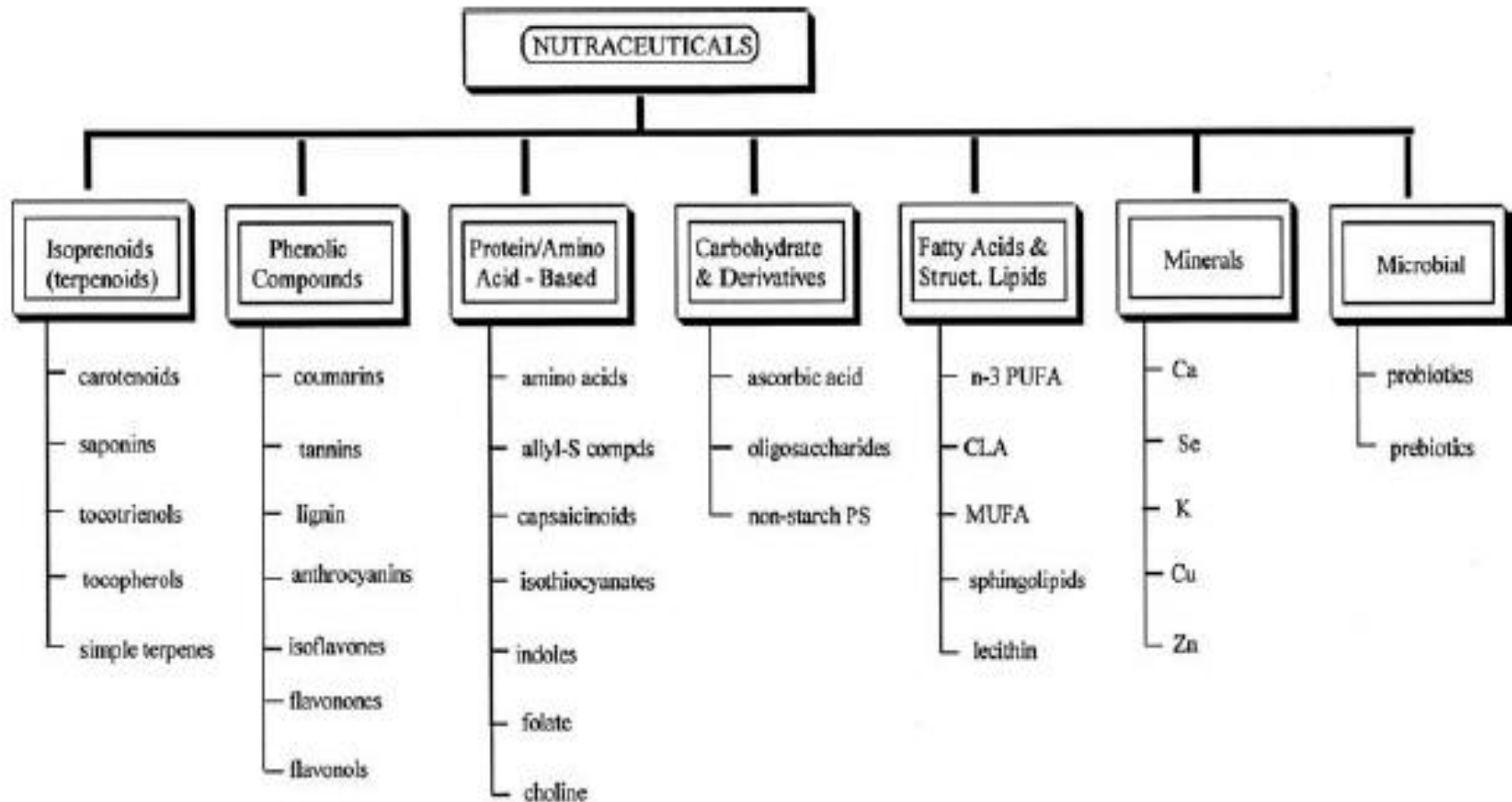


ESU 009– Classification of nutraceuticals compounds phenolic and carbohydrates

Lecture 8



Classification Based On The Chemical Groups



Phenolic compounds

- Like the terpenoids, phenolic compounds are also considered secondary metabolites.
- The base for this very diverse family of molecules is a phenol structure, which is a hydroxyl group on an aromatic ring.
- From this structure, larger and interesting molecules are formed such as anthocyanins, coumarins, phenylpropamides flavonoids, tannins, and lignin.

Carbohydrates and derivatives

- The glucose derivative ascorbic acid (vitamin C) is perhaps one of the most recognizable nutraceutical substances and is a very popular supplement.
- Ascorbic acid functions as a nutraceutical compound, primarily as an antioxidant.
- Meanwhile, plants produce some oligosaccharides that appear to function as prebiotic substances.



Tea



Wine



Chocolates

Berries



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Food	Mean mg isoflavones per 100 g of food
Soybeans (green, raw, edamame)	48.95
Soy flour (textured)	172.55
Soy protein isolate	91.05
Miso soup (mix, dry)	69.84
Tempeh	60.61
Soybeans (mature seeds, sprouted, raw)	34.39
Tofu (silken)	18.04
Tofu yogurt	16.30
Soy hot dog (frozen, unprepared)	1.00
Soy milk (original, vanilla)	10.73
Soy sauce (soy + wheat; shoyu)	1.18

Menopause



PAPAYA



RED BELL PEPPER



BROCCOLI



KIWI



STRAWBERRIES



PINEAPPLE



KALE



ORANGES



CAULIFLOWER



BRUSSELS SPROUT

10 BEST NATURAL SOURCES OF vitamin c

Vitamin C, also known as ascorbic acid, is an important water-soluble vitamin, which is important for normal growth & development.

Classified as an antioxidant, the primary function of vitamin C is to boost your immune system.

To explore more, visit www.Top10HomeRemedies.com



Oligosaccharide is actually a **carbohydrate** that is extracted using biotechnology. They are not normal carbohydrates. These saccharide polymers have between 3 and 10 linked **simple sugars** that work wonders for the body. They are found in plants like **artichokes, chicory root, onions, legumes, wheatgrass** and **asparagus**.



Thank you

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