

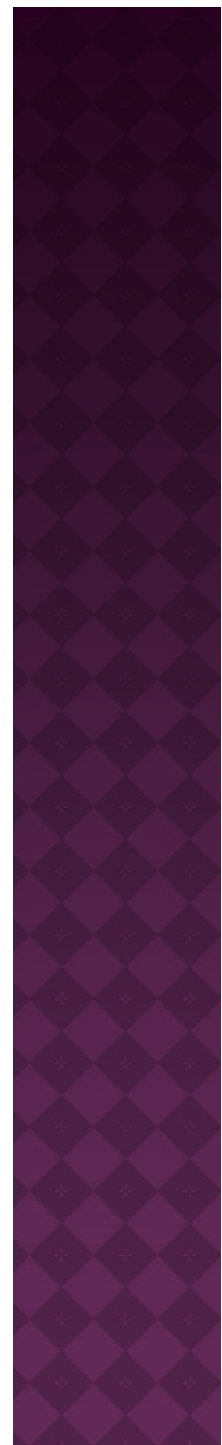
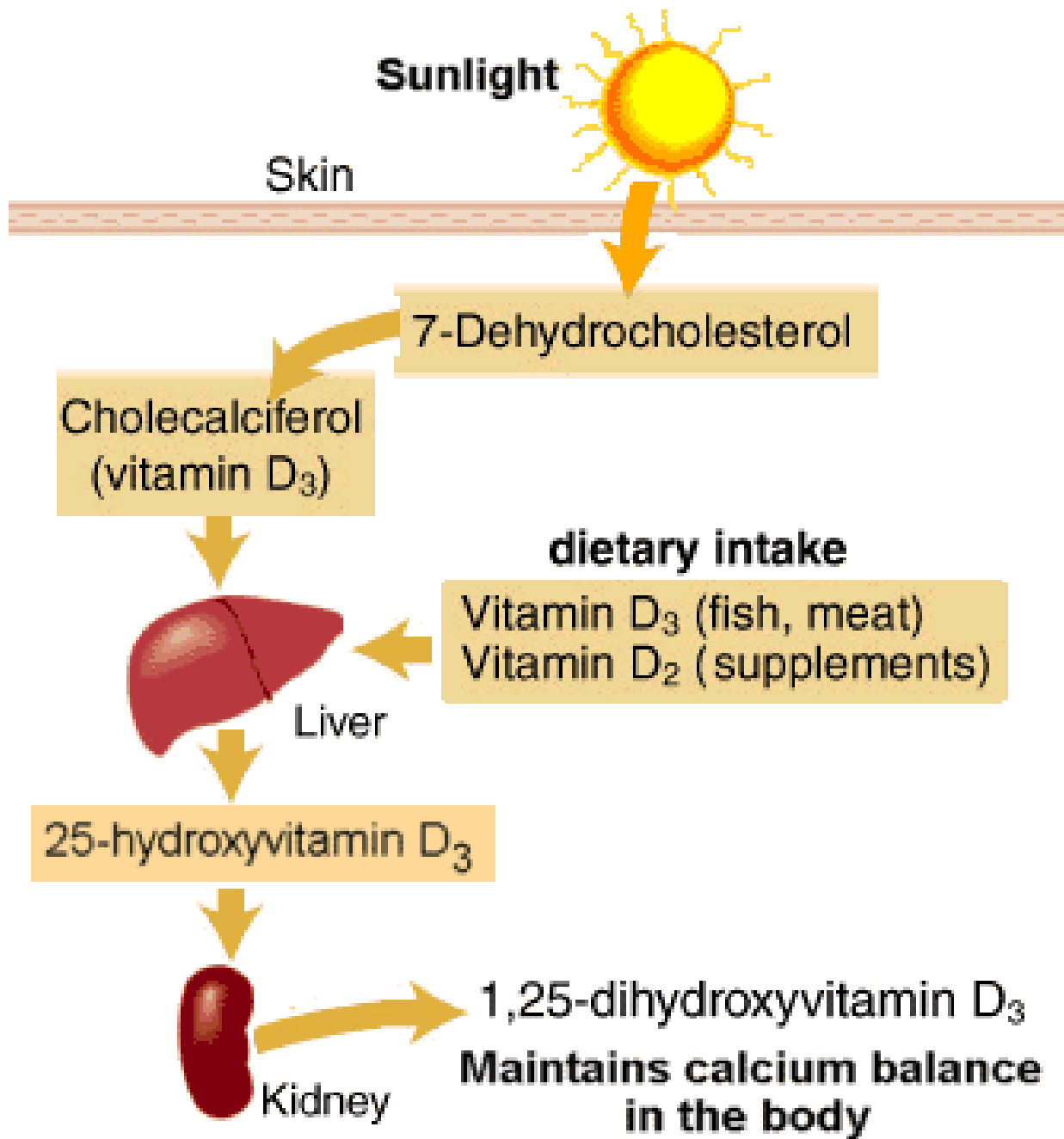


VITAMIN D, A HORMONE IN DISGUISE!

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DEFINITION

- ◉ As just mentioned, “vitamin” D is not a vitamin but actually a hormone!
- ◉ Definition of hormone:
 - A substance, usually a peptide or steroid, produced by one tissue and conveyed by the bloodstream to another to effect physiological activity, such as growth or metabolism.
- ◉ Definition of vitamin:
 - Any of a group of organic compounds that are essential for normal growth and nutrition and are required in small quantities in the diet because they cannot be synthesized by the body.

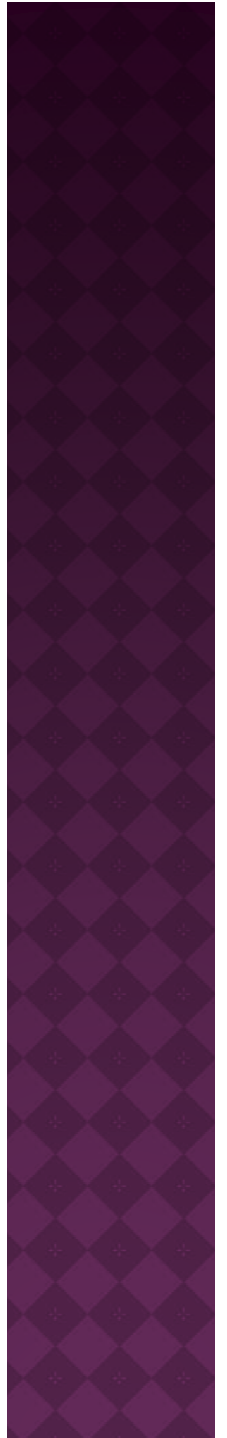


VITAMIN D REFERENCE INTAKES

- ◉ 0-12 months: 400 IU/day
 - ◉ 1-70 years of age: 600 IU/day
 - ◉ 71+ years of age: 800 IU/day
 - ◉ Pregnant/lactating: 600 IU/day
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- ◉ The upper level intakes for vitamin D are:
 - ◉ 0-6 months of age: 1,000 IU
 - ◉ 6-12 months of age: 1,500 IU
 - ◉ 1-3 years of age: 2,500 IU
 - ◉ 4-8 years of age: 3,000 IU
 - ◉ 9-71+ years of age: 4,000 IU
 - ◉ Pregnant/lactating: 4,000 IU

VITAMIN D STATUS BY BLOOD LEVELS OF 25(OH)D

Vitamin D status	25(OH)D in nanograms per milliliter (ng/mL)
Deficient	Less than 20 ng/mL
Insufficient	20 to 29 ng/mL
Sufficient	30 ng/mL or more
Potentially harmful	More than 150 ng/mL



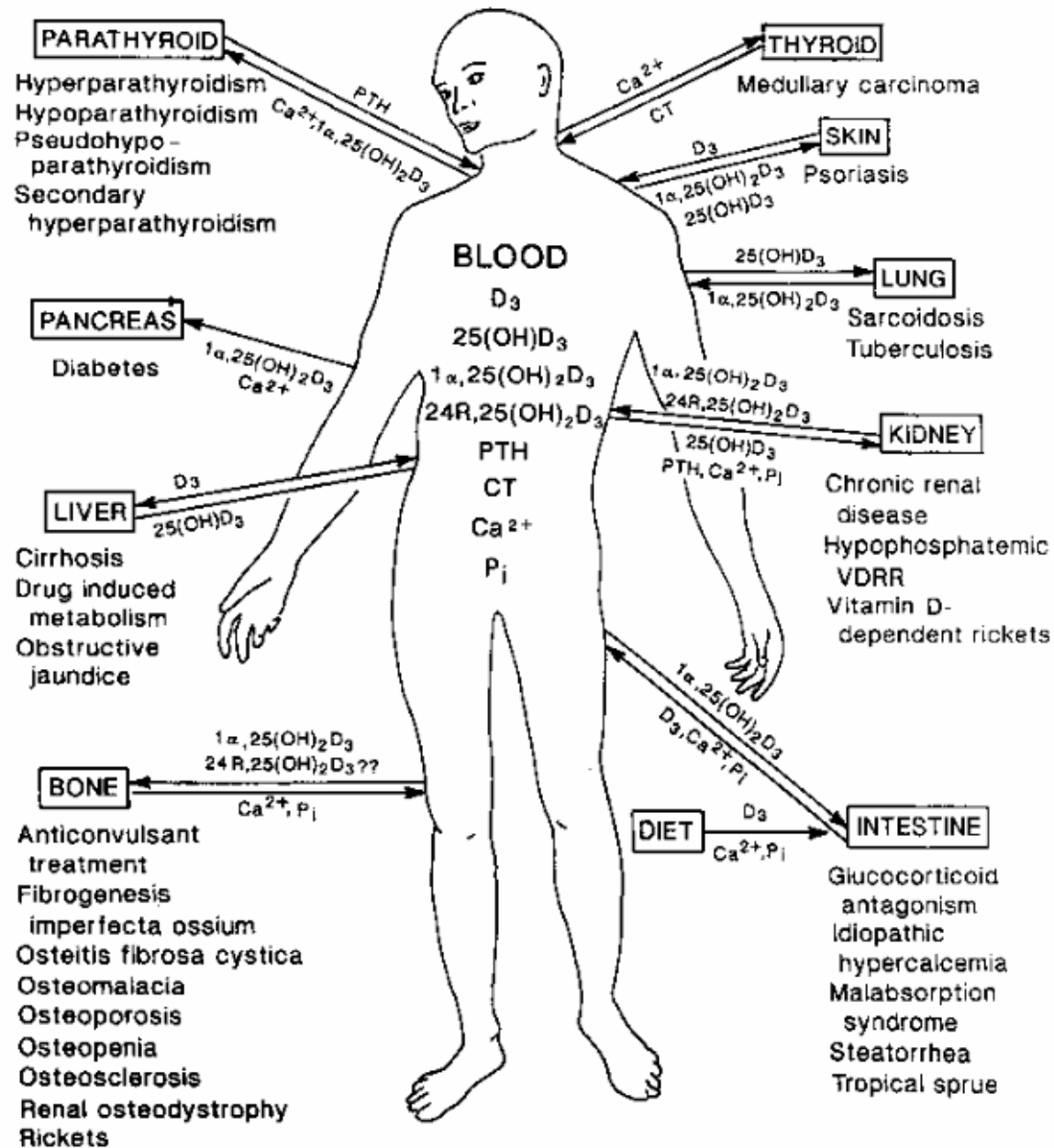
DIETARY SOURCES

- Fatty fish species, such as:
 - Catfish, 85 g (3 oz) provides 425 IU (5 IU/g)
 - Salmon, cooked, 100 g (3.5 oz) provides 360 IU (3.6 IU/g)
 - Mackerel, cooked, 100 g (3.5 oz), 345 IU (3.45 IU/g)
 - Sardines, canned in oil, drained, 50 g (1.75 oz), 250 IU (5 IU/g)
 - Tuna, canned in oil, 100 g (3.5 oz), 235 IU (2.35 IU/g)
 - Eel, cooked, 100 g (3.5 oz), 200 IU (2.00 IU/g)
- 1 cup of fortified milk = 100 IU
- 1 oz of cheese = 12 IU

DIETARY SOURCES

- A whole egg (60g) provides 20 IU (0.33 IU/g)
- Beef liver 100 g (3.5 oz), provides 15 IU (0.15 IU/g)
- Fish liver oils, such as cod liver oil, 1 Tbs. (15 ml) provides 1360 IU (90.6 IU/ml)
- UV-irradiated mushrooms and UV-irradiated yeast are the only vegan sources of vitamin D from food.
 - A 100g portion provides:
 - (regular) 14 IU (0.14 IU/g)
 - (exposed to UV) 500 IU (5 IU/g)
- Nutrition labels in the US are not required to list vitamin D content unless a food has been fortified (usually D2).

VITAMIN D IN HUMAN DISEASE STATES





Thank
You!

CENTER FOR
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AND
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