

SCHEDULE OF DOSAGES - THE AVERAGE INITIAL AND MAINTENANCE DOSAGES GIVEN TO THREE AGE CATEGORIES.

AVERAGE MAINTENANCE DOSAGE

Depending on response to therapy the following initial dosages are maintained for several weeks or months. Usually they are reduced to 1/2 to 1/3 this initial dosage within that time.

THE AVERAGE INITIAL QUANTITIES AND DOSAGES OF VITAMINS

CALCIUM

DAILY DOSAGE OF CAL-MAG DOLOMITE BONE MEAL ET CETERA TO PROVIDE

PRODUCTS USED	QUANTITY PRESCRIBED	TOTAL DAILY DOSAGES		
		VITAMIN A	D2 & D3	
	<u>Three Year old Child</u>			250 Mg. to 1/2 Gram
Aquasol A & D	2-3 drops b.i.d.-t.i.d.	5,000 to 12,000 iu	1,000 to 2,400 iu	
	<u>Fifteen year old Adolescent</u>			500 Mg. to 1.0 Gram
Aquasol A & D	5 drops t.i.d.	20,000 iu	4,000 iu	
Halibut liver oil capsules	1 b.i.d.	10,000 iu	800 iu	
	TOTAL	30,000 iu	4,800 iu	
	<u>150 - 175 Pound Adult</u>			1,000 Mg. to 1.5 Gram.
Aquasol A & D	6 drops t.i.d.	24,000 iu	4,800 iu	
Halibut liver oil capsules	2 t.i.d.	30,000 iu	2,400 iu	
	TOTAL	54,000 iu	7,200 iu	

THE VITAMIN PREPARATIONS

"Aquasol A and D" is mfgd. by Rorer Can. Inc. 130 East Dr. Bramlea Ont. Can. L6T 1C3, (416) 792-1212. In 50cc bottles. Each 3 drops contains 800IU of Vit. D-2 and 4,000 of Vit A. In the USA this may be substituted with Twin Lab's water soluble "Allergy D Caps. 400 IU", containing a preferred Vit. D-3, and "Allergy A Caps. 1,000 IU".

Halibut liver oil capsules 400 IU Vit. D-2 + D-3 and 5,000 IU natural A are mfgd. by R.P. Scherer of Ont. (519) 253 2405.

MONITORING OF DOSAGES

SMA serum blood tests are done prior to therapy for hypercalcaemia due to hyperparathyroidism, pre existing vitamin D therapy or other cause.

SPECIAL REPORT ON THE RECOMMENDATIONS OF THE NATIONAL RESEARCH COUNCIL'S COMMITTEE ON DIET AND HEALTH, REGARDING DIETARY SUPPLEMENTS

SUMMARY OF ADVERSE EFFECTS

"In summary, to date there is no evidence that low levels of dietary supplements adversely affect the general population." However, "some people ingest supplements in potentially harmful amounts."

The Dietary Supplement chapter mentions that FDA in 1986 requested that physicians document any problems they observed with supplement use, using the FDA Adverse Reaction Monitoring System.

COMMENTARY: FDA reports that, as of April 1989, only 11 Adverse Reaction Reports have been received.

The Dietary Supplement chapter refers to the Vitamin and Mineral Safety Index, developed by Hathcock, and supplies a table of Minimum Toxic Doses, adapted from Hathcock, as follows:

NUTRIENT	HIGHEST RECOMMENDED ADULT INTAKE	MINIMUM TOXIC DOSE
Vitamin A	5000 IU	25,000-50,000 IU
Vitamin D	400 IU	50,000 IU
Vitamin E	30 IU	1,200 IU
Vitamin C	60 mg	1,000-5,000 mg
Calcium	1200 mg	12,000 mg
Phosphorus	1200 mg	12,000 mg
Magnesium	400 mg	6,000 mg

THOUGH THE "MINIMUM TOXIC DOSE" OF VITAMINS A AND D HAVE BEEN RAISED FROM THEIR "RECOMMENDED DAILY ALLOWANCE" OR "R.D.A." OF 5,000 AND 400 IU RESPECTIVELY, TO 50,000 IU, THEIR RDA'S ARE STILL HUNG AT 5,000 AND 400 !!

I GUESS THAT IN TIME THE RDA'S WILL COME UP TO AROUND 2,000 IU OF D AND 25,000IU OF A.

Nutrition News

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VITAMIN SAFETY

Cases of alleged vitamin toxicity are often reported in the press, usually supported only by hearsay or anecdotal evidence, and without any case details or adequate scientific support. How valid are such claims?

In the U.S., the F.D.A. established an ad hoc committee to study vitamin & mineral products for human use. A total of 245 substances, including active & excipient ingredients, were considered on the basis of available scientific data. The recommendations of this committee were published in the Federal Register of March 16, 1979. The following points are excerpted from a number of sources, including the proceedings of this ad hoc committee.

Side effects of toxic symptoms attributable to vitamin intake are dose-related. The levels of vitamins normally ingested by the average North American in the diet and multi-vitamin supplements are insufficient to produce side effects.

With the possible exception of vitamin D, even the rare cases of vitamin toxicity which do occur are reversible and leave no lasting effects. When the vitamin in question is withdrawn, symptoms disappear and the body returns to its previous state.

A study of 10,000 people who took up to 100 times the R.D.A. for vitamin E showed no signs or symptoms of vitamin toxicity as measured by 14 different biochemical and clinical parameters.

The safety issue of vitamin A has been grossly exaggerated. There are five or fewer cases of hypervitaminosis A reported annually, and there have been no deaths attributed to vitamin A toxicity. (Compare this situation to tens of thousands of emergency room treatments and hundreds of deaths caused annually by aspirin and similar analgesics.) According to the Federal Register, "In the great majority of cases, complete withdrawal of vitamin A results in regression of signs and symptoms in a matter of days, with no apparent changes remaining in a few weeks." There have been some reports of temporary

vitamin A toxicity in infants (less than 1 yr. old) taking from 12,000 to 35,000 I.U. daily for several months, and in 1 to 5 year olds similarly taking from 37,500 to 600,000 I.U. daily. Two cases of adult hepatic injury have been reported, one in a woman who took from 100,000 to 1,250,000 I.U. daily for 5 years, the other in a man who took 400,000 I.U. daily for 8 years.

Vitamin D is the most potentially toxic of the vitamins, because massive doses can lead to calcification of soft tissues. According to the Federal Register, however, symptoms of vitamin D intoxication

have only been reported at daily levels in excess of 25,000 I.U. -- or 62½ times the R.D.A.

According to an exhaustive review of scientific data, vitamin C is a non-toxic substance even when taken in very large amounts. Daily oral intakes of 3 to 6 grams for 15 months, daily I.V. doses of up to 35 grams for 6 weeks, and daily oral amounts of up to 80 grams for 6 to 10 days have been administered without any side effects or over-sensitivity reactions being observed. Very large quantities of vitamin C have a laxative effect, but no other side effects have been scientifically documented -- no alleged cases of kidney stones, rebound scurvy or gout -- and no alleged destruction of vitamin B-12.

The same kinds of scientific data that are required to prove any beneficial claim for vitamins should also be required to prove any allegation of toxicity. The toxicity argument used by those who wish to limit supplementation is highly overstated. Improper observations and anecdotal case reports have been responsible for many alarming rumours about potential vitamin toxicity. Inadequate nutrition, including suboptimal intake of vitamins, is a far greater threat to the public health than the alleged rare instances of vitamin toxicity. (Vitamin Issues, Vol II, No. 1)

CONCERNING AMERICAN AQUASOL A AND D VITAMIN PREPARATIONS:

In past years a White Pharmaceutical company made a product similar to Aquasol A and D, but I believe discontinued this line.

I am now advised that "TWIN LAB" company manufactures the products described below.

VITAMIN D

ALLERGY D CAPS 400 i.u.

Specially designed for fish and fish oil allergic individuals. Dry and water dispersed for better absorption and utilization. One hard gelatin capsule supplies 400 i.u. of vitamin D (from vitamin D-3)

Capsules: 100's.

PLEASE NOTE: THE VITAMIN D IN THESE PREPARATIONS IS NATURAL D-3. THIS MAY BE A BETTER FORM OF VITAMIN D THAN THE SYNTHETIC D-2 FORM WHICH IS PRESENT IN AQUASOL A AND D.

VITAMIN A & D

ALLERGY A&D CAPS 10,000 i.u./400 i.u.

Specially designed for fish and fish oil allergic individuals. Dry and water dispersed for better absorption and utilization.

One hard gelatin capsule supplies:

Vitamin A (from vitamin A acetate) 10,000 i.u.

Vitamin D (from natural form vitamin D-3) 400 i.u.

Capsules: 100's.

ALLERGY A&D CAPS 25,000 i.u./1000 i.u.

Specially designed for fish and fish oil allergic individuals. Dry and water dispersed for better absorption and utilization.

One hard gelatin capsule supplies:

Vitamin A (from vitamin A acetate) 25,000 i.u.

Vitamin D (from natural form vitamin D-3) 1000 i.u.

Capsules: 100's.

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