

**Vitamin D: General information, upper levels for all age groups, RDAs for all age groups and table of rich food sources**

<b>Vitamin D</b>	
<b>Functions</b>	Enables body to use calcium efficiently Growth Bone health Immunity Blood pressure regulation Insulin regulation
<b>Sources</b>	UVB rays of sunlight on skin, oily fish, fortified foods, eggs
<b>Risk factors for deficiency</b>	Infants Dark skinned people Elderly and institutionalised Those who cover skin when outdoors/wear SPF Those with malabsorption (e.g. Cystic fibrosis) Inflammatory bowel disease (Chrohns) Obese
<b>Deficiency signs</b>	Muscle weakness and pain Poor bone health Many other conditions
<b>When supplements useful?</b>	For all age groups, especially infants & older adults
<b>Adverse effects</b>	Vit D toxicity occurs with high doses - it causes the blood calcium levels to rise (hypercalcaemia). This could cause kidney stones + organ calcification over time
<b>UL</b>	There are upper levels (see table)
<b>Contraindications</b>	N/A
<b>Other</b>	For bone health, take calcium & vit D together Beware of sports people taking unsafe high doses



Tolerable Upper Level (UL)		
Life Stage Group	Vitamin D (µg/d)	
Reference	IOM	EFSA
<b>Infants</b>		
0-6 mo	25	25
7-12 mo	38	25
<b>Children</b>		
1-3 y	63	50
4-8 y	75	50
<b>Males</b>		
9-13 y	100	50-100
14-18 y	100	100
19-30 y	100	100
31-50 y	100	100
51-70 y	100	100
>70 y	100	100
<b>Females</b>		
9-13 y	100	50-100
14-18 y	100	100
19-30 y	100	100
31-50 y	100	100
51-70 y	100	100
>70 y	100	100
<b>Pregnancy</b>		
14-18 y	100	100
19-50 y	100	100
<b>Lactation</b>		
14-18 y	100	100
19-50 y	100	100

RDA	
Life Stage Group	Vitamin D (µg/d)
Reference	IOM
<b>Infants</b>	
0-6 mo	10*
7-12 mo	10*
<b>Children</b>	
1-3 y	15
4-8 y	15
<b>Males</b>	
9-13 y	15
14-18 y	15
19-30 y	15
31-50 y	15
51-70 y	15
>70 y	20
<b>Females</b>	
9-13 y	15
14-18 y	15
19-30 y	15
31-50 y	15
51-70 y	15
>70 y	20
<b>Pregnancy</b>	
14-18 y	15
19-50 y	15
<b>Lactation</b>	
14-18 y	15
19-50 y	15

Food	Serving	Vitamin D (IU)	Vitamin D (µg)
Pink salmon, canned	3 ounces	530	13.3
Sardines, canned	3 ounces	231	5.8
Mackerel, canned	3 ounces	213	5.3
Cow's milk, fortified with vitamin D	8 ounces	98	2.5
Soy milk, fortified with vitamin D	8 ounces	100	2.5
Orange juice, fortified with vitamin D	8 ounces	100	2.5
Cereal, fortified	1 serving (usually 1 cup)	40-50	1.0-1.3
Egg yolk	1 large	21	0.53