預防嬰幼兒及孕婦缺乏維他命D的聯合建議

維他命D幫助腸道吸收鈣質、維持血液中鈣質和磷質的正常水平，對骨骼生長、維持骨骼健康至為重要。人體體內的維他命D大多經由陽光照射皮膚而合成，小部分從食物攝取。

本港情況

根據一項於2019至2021年進行數據收集，調查本港嬰幼兒及孕婦的維他命D狀況的本地研究[1]顯示：

嬰幼兒

- 嬰幼兒出現維他命D不足[2]及缺乏[2]的比率如下：

嬰幼兒	維他命D不足的比率	維他命D缺乏的比率	維他命D不足及缺乏的比率
2至6個月大	19.8%	12.6%	32.4%
7至11個月大	12.9%	5.1%	18.0%
12至23個月大	11.3%	0.8%	12.1%

- 接受母乳餵哺的嬰兒出現維他命D不足／缺乏維他命D的風險較高；服用維他命D補充劑或膳食含較多維他命D的嬰幼兒，出現維他命D不足／缺乏維他命D的機會較低。

孕婦

- 孕婦出現維他命D不足及缺乏的比率為9.7%（不足的比率為9.3%；缺乏的比率為0.4%）；有服用多種維他命及礦物質補充劑的孕婦，出現維他命D不足／缺乏維他命D的機會較低。

1 IP Patrick, et al. Commissioned Study on Vitamin D Status of Infants, Young Children and Pregnant Women in Hong Kong. Health and Medical Research Fund Reference No.: Vit D-HKU.

2 以血清25-羥基維他命D(25(OH)D)的總濃度計算，血清25(OH)D水平25至低於50nmol/L屬維他命D不足；低於25nmol/L則屬缺乏維他命D。

建議

衞生署成立了一個跨專業專家工作小組，成員由不同機構的代表組成，包括衞生署、醫院管理局、香港私家醫院聯會、香港社會醫學學院、香港家庭醫學學院、香港婦產科學院、香港兒科醫學院、香港內科醫學院、愛嬰醫院香港協會，以及聯合國兒童基金香港委員會。工作小組旨在制訂聯合建議，預防嬰幼兒及孕婦缺乏維他命D。考慮過海外、國際指引及本港的情況後，工作小組提出以下聯合建議：

12個月大以下的嬰兒

- 不論餵哺方式為何，健康的嬰兒[3]每天需要400國際單位（10微克）的維他命D。
- 母乳餵哺裨益甚多，母乳更是嬰兒最理想的食物。然而，與其他所有天然食物一樣，母乳所含的維他命D不多，未必能夠滿足嬰兒攝取維他命D的需求。
- 為確保嬰兒體內維持充足維他命D水平，我們建議以母乳餵哺（包括全母乳餵哺及以母乳加配方奶餵哺）的嬰兒，由剛出生至12個月大每天服用400國際單位（10微克）的維他命D補充劑[4]。
- 6個月大以上的嬰兒進食固體食物時，應選吃各種含豐富維他命D的天然食物，例如油脂較高的魚類（如三文魚及沙甸魚）和雞蛋，從而在膳食中攝取更多維他命D。
- 陽光照射皮膚是攝取維他命D最自然的方法，但12個月大以下的嬰兒應避免直接照射陽光。現時並沒有照射多少紫外線才能合成充足的維他命D，而同時不增加日後患上皮膚癌風險的安全指標。

3有些嬰兒或因個別的醫療狀況而每日需要超過 400國際單位（10微克）的維他命D，他們應遵從其醫生的指示。

4 嬰兒配方奶及較大嬰兒配方奶添加了維他命D。

幼兒 / 幼童

- 一歲後幼童每天需要400至600國際單位（10至15微克）的維他命D。

- 我們建議幼童進食：
  - 含豐富維他命D的食物，例如油脂較高的魚類（如三文魚及沙甸魚）和雞蛋；
  - 添加了維他命D的食物及飲品（例如牛奶、乳製品、豆奶等）。這類添加了維他命D的食物及飲品在本地市場有售，家長可查閱食物標籤上的資料（包括配料表和營養標籤），識別哪些產品加添了維他命D。
    （詳情請瀏覽https://www.fhs.gov.hk/tc_chi/health_info/child/30190.html#faq7）

- 幼童活潑好動，可因應他們的發展與年齡多做合適的戶外體能活動。戶外體能活動、玩耍可讓身體產生維他命D，提升體內維他命D的水平。然而，維他命D合成的水平受多個因素影響。兒童進行戶外活動時，應遵守防曬指引。
  （https://www.chp.gov.hk/files/her/protect_uv_pamphlet_tc.pdf）

- 兒童如有風險因素（例如膚色較深、少接觸陽光、從膳食攝取維他命D不足等），可能需要每天服用400國際單位（10微克）的維他命D補充劑。如有疑慮，家長應徵詢醫護專業人員的意見。
  （詳情請瀏覽https://www.fhs.gov.hk/tc_chi/health_info/child/30078.html#p04）

孕婦

- 孕婦每天需要400至600國際單位（10至15微克）的維他命D。

- 我們建議孕婦在懷孕期間服用適合產前使用的多種維他命及礦物質補充劑（內含綜合維他命和礦物質，包括維他命D、碘質、葉酸、鐵質等）。這些補充劑大多含有400國際單位（10微克）的維他命D，能夠大致滿足孕婦對維他命D的需求。

- 孕婦應飲食健康，並選吃含豐富維他命D的食物，例如油脂較高的魚類（如三文魚及沙甸魚）和雞蛋、添加了維他命D的飲品（如牛奶、乳製品等），以及加鈣飲品（如豆奶）。

- 孕婦應保持活躍的生活模式，並進行適量的戶外活動。在陽光下進行戶外活動可讓身體產生維他命D，提升體內維他命D的水平。然而，維他命D合成的水平受多個因素影響。孕婦進行戶外活動時，應遵守防曬指引。
  （https://www.chp.gov.hk/files/her/protect_uv_pamphlet_tc.pdf）

預防嬰幼兒及孕婦缺乏維他命D工作小組　2025年8月

關於維他命 D 的常見問題

1. 哺乳媽媽已服用含有維他命 D 的多種維他命及礦物質補充劑，寶寶還要補充維他命 D 嗎？

- 哺乳媽媽每天服用含有維他命 D 的補充劑，可確保媽媽攝取足夠的維他命 D。
- 不論媽媽有否服用維他命 D 補充劑，12 個月大以下吃母乳的寶寶都應每天服用 400 國際單位 (10 微克) 的維他命 D 補充劑，以確保寶寶攝取足夠的維他命 D。

2. 服用維他命 D 補充劑時需要注意什麼?

- 按照醫護人員指示下服用維他命 D 補充劑是安全的。若你考慮給孩子服用維他命 D 補充劑，必須先諮詢醫護人員，並遵照藥物標籤上的指示使用。
- 各地區的衞生機構對維他命 D 都設定了「可耐受的最高攝入量」(Tolerable Upper Intake Level)，即長期每天攝入維他命 D 的最高限量。對一般群體而言，維他命 D 的攝取分量達到「可耐受的最高攝入量」水平，對幾乎所有人士都不會造成不良健康影響。然而，若維他命 D 攝取量超過「可耐受的最高攝入量」，隨着攝取量的增加，出現不良健康反應的風險也會相應提高。
- 中國營養學會將 0 至 3 歲嬰幼兒的維他命 D「可耐受的最高攝入量」設定為每天 800 國際單位（20 微克）[1]。在歐美地區， 0 至 6 個月大嬰兒的維他命 D「可耐受的最高攝入量」為每天 1000 國際單位 （25 微克），而 6 至 12 月個月大嬰兒的維他命 D「可耐受的最高攝入量」則為每天 1400 國際單位（35 微克）[2,3]。
- 長期攝入過量的維他命 D 可能會導致中毒。維他命 D 中毒是罕見的，通常因使用不當，以致長期服用大劑量維他命 D 補充劑而引起。臨床表現上，維他命 D 中毒會導致高血鈣，患者出現噁心、嘔吐、肌肉無力、神經精神障礙、疼痛、食慾不振、脫水、多尿、極度口渴等症狀；在極嚴重的情況下，可能引發腎結石、心律不整、腎衰竭。如懷疑維他命 D 攝入過量，應立即就醫。
- 為避免攝入過量維他命 D，必須在使用維他命 D 補充劑前先諮詢醫護人員，並遵照其建議的劑量服用。服用維他命 D 的嬰兒須避免服用其他含維他命 D 營養素的補充劑和魚肝油。

3. 全吃配方奶的嬰兒需要補充維他命 D 嗎？

- 全吃配方奶的嬰兒一般不需要額外補充維他命 D。
- 嬰兒配方奶已添加維他命 D。根據《2014 年食物及藥物（成分組合及標籤）（修訂）（第 2 號）規例》，在香港出售的嬰兒配方產品必須含有維他命 D，含量為每 100 千卡 1 至 2.5 微克（40 至 100 國際單位）。不同嬰兒配方產品的維他命 D 含量差異不大，包裝上的營養標籤已列出每 100 毫升沖調後配方奶的維他命 D 含量。
- 嬰兒的維他命 D 攝取量會隨着飲用配方奶的分量增加。一般而言，嬰兒所飲用的奶量能夠滿足大部分維他命 D 的需求。本港一項研究顯示，絕大多數全吃配方奶嬰兒的維他命 D 水平都是足夠的。
- 如果你對寶寶的飲食和維他命 D 攝取量有任何疑慮，請諮詢醫護人員。

4. 我的孩子已 12 個月大或以上，他應繼續服用維他命 D 補充劑嗎？

- 我們建議 12 個月大以下吃母乳的嬰兒服用維他命 D 補充劑。
- 隨着孩子長大，我們鼓勵他們遵循健康的生活方式，包括均衡飲食、吃含有維他命 D 的食物，以及經常到戶外活動接觸陽光，以獲得足夠的維他命 D。
- 若你的孩子很少進食含維他命 D 的食物 (例如添加維他命 D 的奶製品)、較少接觸陽光、常留在室內、外出時手腳經常被衣服遮蓋、膚色較深、或肥胖等，他們的維他命 D 水平有機會不足，可能需要持續每天補充 400 國際單位的維他命 D。如有疑慮，家長應諮詢醫護人員。

5. 我的孩子需要服用鈣質補充劑嗎?

- 根據中國營養學會的建議，0 至 6 個月大及 7 至 11 個月大的嬰兒，每天鈣質的適宜攝入量分別為 200 毫克及 350 毫克 [1]。
- 12 個月以下的嬰兒透過母乳或嬰兒配方奶可滿足他們的鈣質需要，而無須服用鈣質補充劑。6 個月以上的嬰兒亦可進食含鈣質豐富的食物，以攝取鈣質。
- 1 至 3 歲的幼兒每天需要 500 毫克的鈣質 [1]。日常飲食包括 360 至 480 毫升的牛奶 (或加鈣豆奶、乳酪或芝士)，以及進食不同種類的食物，可滿足他們每日鈣質需要。
- 如你對孩子的飲食和鈣質攝取有疑慮，應諮詢醫生或營養師以評估孩子的飲食和整體健康狀況，是否需要服用鈣質補充劑及補充的劑量。
- 下表列出含豐富鈣質的食物例子及其鈣含量 [4] (以幼兒一般食用分量計算) :

食物	分量	鈣含量	食物	分量	鈣含量
牛奶及奶製品			**蔬菜**		
全脂牛奶	120 毫升	135	菜心	2 湯匙煮熟, 切碎 (40 克)	32 至 44
乳酪	100 毫升	175			
片裝芝士	1 片 (20 克)	118	白菜	2 湯匙煮熟, 切碎 (40 克)	37 至 47
大豆製品					
加鈣豆奶	120 毫升	110 至 200	菠菜	2 湯匙煮熟, 切碎 (40 克)	54 至 61
板豆腐	¼ 磚 (100 克)	116 至 201			
豆腐乾	1 件 (30 克)	92	**乾豆類**		
豆腐花	½ 碗 (151 克)	130	大豆 (黃豆)	¼ 杯烚熟 (43 克)	44
種籽及果仁			斑豆	¼ 杯烚熟 (43 克)	20
芝麻醬 (tahini)	1 湯匙 (15 克)	49 至 153	鷹嘴豆	¼ 杯烚熟 (41 克)	20

6. 哪些食物含有豐富維他命 D?

- 一些食物天然含有維他命 D，例如油脂較多的魚類、雞蛋等。有些牛奶、豆奶或早餐穀物可能添加了維他命 D。每天給孩子提供這些食物，作為均衡飲食的一部分，以提升維他命 D 的攝取。
- 以下是含豐富維他命 D 的食物例子:

食物	分量	維他命 D 含量	
		微克	國際單位
三文魚，生 [5]	40 克	5.6	224
鯰魚，生 [5]	40 克	5	200
比目魚，生 [5]	40 克	11	440
鱈魚，生 [6]	40 克	3.1	124
烏頭，生 [6]	40 克	3.2	128
鯖魚，生 [7]	40 克	4	160
紅衫魚，生 [7]	40 克	4.4	176
秋刀魚，生 [7]	40 克	6.0	240
沙甸魚，熟 [5]	40 克	1.9	77
雞蛋，生 [5]	½ 隻 (25 克)	0.5	20
牛肝，生 [5]	40 克	0.5	20
添加了維他命 D 的牛奶 [8]	120 毫升	0.6 至 2.7	24 至 108
添加了維他命 D 的加鈣豆奶 [8]	120 毫升	0.9 至 1.2	36 至 48
添加了維他命 D 的早餐穀物 [8]	30 克	0.7 至 1.5	28 至 60

7. 如何得知產品是否添加了維他命 D?

你可查看產品包裝上的食物標籤及留意:

1. 配料表中包括「維他命 D」或「維生素 D」的成分；
2. 有些產品會在營養標籤中列出維他命 D 的含量；
3. 有些產品包裝上會標註與維他命 D 相關的營養聲稱。

參考資料:

1. 中國營養學會。《中國居民膳食營養素參考攝入量（2023 年版）》
2. European Food Safety Authority (EFSA). (2018). Update of the tolerable upper intake level for vitamin D for infants, *EFSA Journal*, 16(8), 5365. https://doi.org/10.2903/j.efsa.2018.5365 Accessed on 24th June, 2025
3. U.S. Department of Health and Human Services National Institutes of Health (NIH) Office of Dietary Supplements. (2023). Vitamin D fact sheet for health professionals. Retrieve from: https://ods.od.nih.gov/factsheets/VitaminD-HealthProfessional/ Accessed on 24th June, 2025
4. 香港食物安全中心的營養素查詢系統；加鈣豆奶的鈣質含量資料則來自本地加鈣豆奶產品的包裝。於 2025 年 6 月 24 日查閱
5. 美國農業部食品資料中心 (https://fdc.nal.usda.gov/)。於 2025 年 6 月 24 日查閱
6. 新加坡健康促進局 (https://www.hpb.gov.sg/healthy-living/food-beverage/tools) 。 於 2025 年 6 月 24 日查閱
7. 日本食品標準成分表 2015 版 (https://www.mext.go.jp/en/policy/science_technology/policy/title01/detail01/1374030.htm) 。於 2025 年 6 月 24 日查閱
8. 本地產品包裝上的營養標籤。於 2025 年 6 月 24 日查閱

Joint Recommendation on Prevention of Vitamin D Deficiency among Infants, Young Children, and Pregnant Women

Vitamin D is essential for bone health. Vitamin D helps calcium absorption in the gut, and maintains normal levels of calcium and phosphate in the blood, keeping bones strong. Most of the vitamin D in our body is made when the skin is exposed to sunlight. A small amount of vitamin D comes from foods.

LOCAL SITUATION

A local study[1] with fieldwork between 2019 and 2021 was conducted to assess the vitamin D status of infants, young children and pregnant women. The results showed that:

Infants and young children

- The prevalence of vitamin D insufficiency[2] and deficiency[2] of infants and young children was tabulated as follows:

Infants and young children	Prevalence of vitamin D insufficiency	Prevalence of vitamin D deficiency	Prevalence of vitamin D insufficiency and deficiency
2-6 months	19.8%	12.6%	32.4%
7-11 months	12.9%	5.1%	18.0%
12-23 months	11.3%	0.8%	12.1%

- Infants who were breastfed were at higher risk being vitamin D insufficient/deficient while those who had taken a vitamin D supplement or having a higher vitamin D intake from diet were less likely to be vitamin D insufficient/deficient.

Pregnant women

- The prevalence of vitamin D insufficiency and deficiency in pregnant women was 9.7% (insufficiency 9.3% and deficiency 0.4%). Those who had taken a multiple micronutrient supplement were less likely to be vitamin D insufficient/deficient.

1 IP Patrick, et al. Commissioned Study on Vitamin D Status of Infants, Young Children and Pregnant Women in Hong Kong. Health and Medical Research Fund Reference No.: Vit D-HKU.
2 Vitamin D insufficiency and deficiency were defined as serum total 25(OH)D concentration as 25 to <50 nmol/L and <25 nmol/L respectively.

RECOMMENDATIONS

A multi-disciplinary expert Working Group ("Working Group") comprising representatives from the Department of Health (DH), the Hospital Authority, the Hong Kong Private Hospitals Association, the Hong Kong College of Community Medicine, the Hong Kong College of Family Physicians, the Hong Kong College of Obstetricians and Gynaecologists, the Hong Kong College of Paediatricians, the Hong Kong College of Physicians, the Baby Friendly Hospital Initiatives Hong Kong, and the UNICEF Hong Kong, was established under the Department of Health to formulate joint local recommendations for prevention of vitamin D deficiency among pregnant women, infants and young children. After considering overseas and international guidelines as well as the local situation, the Working Group made the following joint recommendations:

Infants under 12 months

- Healthy infants[3] require 400 IU (10 micrograms (µg)) of vitamin D per day irrespective of their mode of feeding.
- Breastfeeding has many benefits and breastmilk is the ideal food for babies. However, breastmilk, similar to all other natural foods, contains only a small amount of vitamin D and may not meet the infant's need for vitamin D.
- To ensure infants maintain sufficient vitamin D level, vitamin D supplementation of 400 IU (10 µg) per day is recommended for all breastfed infants (including exclusively and partially breastfed infants) from birth to 12 months of age[4].
- Infants above 6 months of age are recommended to have a variety of vitamin D-rich natural foods such as fatty fish (e.g. salmon, sardine) and eggs in the complementary diet. This can help further boost their dietary intake of vitamin D.
- While sun exposure is the most natural way to obtain vitamin D, infants under 12 months are recommended to be protected from direct sunlight. There is no safe threshold of UV exposure for sufficient vitamin D synthesis without increasing skin cancer risk later in life.

3 Some infants may require more than 400 IU (10 µg) of vitamin D per day due to certain medical condition(s) and should follow their doctors' instruction.
4 Infant formula and follow up formula milk contain fortified vitamin D.

Toddlers and Young children

- Above 1 year of age, young children require 400 to 600 IU (10 to 15 µg) of vitamin D per day.
- Young children are recommended to consume a diet with:
  - Vitamin D-rich foods such as fatty fish (e.g. salmon, sardine) and eggs;
  - Foods and beverages (e.g. cow's milk, dairy products, soy milk) that are fortified with vitamin D. Vitamin D fortified foods and beverages are readily available in the local market. Parents can identify vitamin D fortified products by reading the information on the food label (including both the list of ingredients and nutrition label).
    (For details, please refer to https://www.fhs.gov.hk/english/health_info/child/30190.html#faq7)
- Young children are active. They are recommended to participate in physical activities and outdoor play that are suitable for their development and age. Sun exposure during outdoor physical and play activities can increase vitamin D level via endogenous vitamin D synthesis. However, many factors affect the level of vitamin D synthesis. While having outdoor activities, children should follow sun safety practices. (https://www.chp.gov.hk/files/her/protect_uv_pamphlet_en.pdf)
- A daily vitamin D supplementation of 400 IU (10 µg) may be required for children who have risk factors such as having dark skin, having limited sunlight exposure or inadequate dietary intake. Parents are advised to consult healthcare professionals if they have concerns.
  (For details, please refer to https://www.fhs.gov.hk/english/health_info/child/30078.html#p04)

Pregnant women

- Pregnant women require 400 to 600 IU (10 to 15 µg) of vitamin D per day.
- Pregnant women are advised to take a prenatal multiple micronutrient supplement (containing multivitamins and minerals including vitamin D, iodine, folate, and iron, etc.) throughout the pregnancy. Most of these supplements contain 400 IU (10 µg) of vitamin D which should be adequate to meet most of their vitamin D requirement.
- Pregnant women are recommended to consume a healthy diet and choose vitamin D-rich foods such as fatty fish (e.g. salmon, sardine) and eggs as well as vitamin D fortified (e.g. cow's milk and dairy products) and calcium added beverages (e.g. soy milk).
- Pregnant women are recommended to maintain an active lifestyle with suitable outdoor activities. Sun exposure during outdoor activities increase vitamin D level via endogenous vitamin D synthesis. However, many factors affect the level of vitamin D synthesis. However, many factors affect the level of vitamin D synthesis. While having outdoor activities, pregnant women should follow sun safety practices. (https://www.chp.gov.hk/files/her/protect_uv_pamphlet_en.pdf)

The Working Group on Prevention of Vitamin D Deficiency among Infants, Young Children and Pregnant Women
August 2025

Frequently asked questions about vitamin D

1. I am breastfeeding and taking a multivitamin containing vitamin D. Does my baby still need vitamin D drops?

- It is a good idea for breastfeeding mothers to take a daily vitamin D supplement to ensure they have sufficient vitamin D themselves.
- All breastfed babies from birth to 12 months should receive a daily vitamin D supplement of 400 IU (10 micrograms), regardless of whether their mother is taking one. This ensures the baby gets enough vitamin D.

2. What are the precautions about taking vitamin D supplements?

- Vitamin D supplements are safe when taken in the amount advised by healthcare professionals. If you consider giving your child a vitamin D supplement, it is essential to consult a healthcare professional and follow the instructions on the drug or dispensary label before giving it to your child.
- Various health authorities have set the Tolerable Upper Intake Level (UL) for vitamin D, which means the highest level of chronic daily nutrient intake that is likely to pose no risk of adverse health effects for almost all individuals in the general population. As intake increases above the UL, the risk of adverse effects increases.
- The Chinese Nutrition Society sets the UL of vitamin D for children aged 0 to 3 at 800 IU (20 micrograms) per day[1]. A higher UL of vitamin D is recommended in the US and Europe: UL for infants aged 0 to 6 months is 1000 IU (25 micrograms) per day, and UL for infants aged 6 to 12 months is 1400 IU (35 micrograms) per Day[2,3].
- Taking excessive vitamin D for an extended period can potentially lead to vitamin D toxicity. Its occurrence is rare and usually caused by taking large doses of vitamin D supplements for long period of time due to misuse or errors in administration. In terms of clinical presentation, vitamin D toxicity can lead to high calcium levels in blood with the signs and symptoms of nausea, vomiting, muscle weakness, neuropsychiatric disturbances, pain, loss of appetite, dehydration, polyuria, excessive thirst, and consequence of kidney stones, cardiac arrhythmia, renal failure in extreme cases. If you suspect having excessive vitamin D intake, you should seek medical advice promptly.
- To minimise the risk of excessive vitamin D intake, the public should consult healthcare professionals before using vitamin D supplements and take them in the amount recommended. For infants taking vitamin D supplements, they should avoid taking other vitamin D-containing nutrient supplements and cod liver oil.

3. Do exclusively formula-fed infants need to take a vitamin D supplement?

- Infants who are solely fed with formula milk generally do not need a vitamin D supplement.
- Infant formula is fortified with vitamin D. According to the Food and Drugs (Composition and Labelling) (Amendment) (No.2) Regulation 2014, infant formula sold in Hong Kong must contain 1 to 2.5 µg (40 to 100 IU) of vitamin D per 100 kcal. There is little difference in vitamin D content among different infant formula products. The amount of vitamin D provided per 100 ml of formula milk of the product is shown on the nutrition label of the product package.
- Although their vitamin D intake varies with the amount of formula milk consumed, babies generally meet most of their vitamin D requirement with the amount of milk they drink. A local study indicated the vast majority of infants who were exclusively formula-fed had sufficient vitamin D.
- If you have any concerns about your baby's feeding and vitamin D intake, please consult healthcare professionals.

4. My child is 12 months old or above. Should he continue taking a vitamin D supplement?

- All breastfed babies under 12 months of age are recommended to take a vitamin D supplement.
- As children grow, they are encouraged to adopt a healthy lifestyle that includes eating a balanced diet with foods rich in vitamin D, and engaging frequently in outdoor physical activities associated with sunlight exposure to obtain sufficient vitamin D.
- If your child consumes few foods added with vitamin D (e.g. vitamin D-fortified milk products), has limited sun exposure, stays indoors most of the time, always wears clothing covering his arms and legs when outdoors, has dark complexion, or is obese, etc., he may not obtain enough vitamin D. He may still need to take the vitamin D supplement of 400 IU per day. If you have any concerns, please consult a healthcare professional.

5. Does my child need to take a calcium supplement?

- According to the Chinese Nutrition Society, the adequate intake of calcium for infants of 0 to 6 months old is 200 milligrams (mg), and 7 to 11 months old is 350 mg per day[1].
- Babies under 12 months usually do not need calcium supplementation as breastmilk or infant formula can meet their calcium requirements. After 6 months of age, babies also obtain calcium from calcium-rich foods in the complementary diet.
- Children of 1 to 3 years old need 500 mg calcium per day[1]. A diet consisting of 360 to 480 ml of cow's milk (or calcium-fortified soy milk, yoghurt or cheese) along with a variety of foods, can usually meet their daily calcium requirements.
- You should consult your doctor or dietitian if you have concerns about your child's diet and calcium intake. They can conduct assessment about your child's diet and health as a whole and give advice on the need for calcium supplement.
- The following table shows the calcium content of the calcium-rich foods[4] in toddler's portion size.

Food or beverages	**Serving size**	**Calcium content (mg)**	**Food or beverages**	**Serving size**	**Calcium content (mg)**
Milk & milk products			**Vegetables**		
Whole milk	120 ml	135	Choi sum	2 tablespoons cooked, diced (40 g)	32 to 44
Yoghurt	100 ml	175			
Processed cheese	1 slice (20 g)	118	Bok choi	2 tablespoons cooked, diced (40 g)	37 to 47
Soy products					
Calcium-fortified soy milk	120 ml	110 to 200	Spinach	2 tablespoons cooked, diced (40 g)	54 to 61
Firm tofu	¼ block (100 g)	116 to 201			
Soybean curd slab	1 piece (30 g)	92	**Dried beans or legumes**		
Soybean dessert	½ bowl (151 g)	130	Soy beans	¼ cup boiled (43 g)	44
Nuts and seeds			Pinto beans	¼ cup boiled (43 g)	20
Sesame butter, tahini	1 tablespoon (15 g)	49 to 153	Chickpeas	¼ cup boiled (41 g)	20

6. What are foods rich in vitamin D?

- Foods such as oily fish and eggs are naturally rich in vitamin D. Vitamin D may be added to some foods, such as cow's milk, soy milk and breakfast cereals. Offer these foods to your child daily as part of a balanced diet to boost their vitamin D intake.
- Examples and vitamin D content of vitamin D-rich foods:

		Vitamin D content	
Food items	**Serving size**	**Microgram**	**IU**
Salmon, raw [5]	40 g	5.6	224
Catfish, raw [5]	40 g	5	200
Halibut, raw [5]	40 g	11	440
Cod, raw [6]	40 g	3.1	124
Grey mullet, raw [6]	40 g	3.2	128
Mackerel, raw [7]	40 g	4	160
Golden thread, raw [7]	40 g	4.4	176
Pacific saury, raw [7]	40 g	6.0	240
Sardine, cooked [5]	40 g	1.9	77
Chicken egg, raw [5]	½ egg (25 g)	0.5	20
Beef liver, raw [5]	40 g	0.5	20
Cow's milk with vitamin D added [8]	120 ml	0.6 to 2.7	24 to 108
Calcium-fortified soy milk with vitamin D added [8]	120 ml	0.9 to 1.2	36 to 48
Breakfast cereal with vitamin D added [8]	30 g	0.7 to 1.5	28 to 60

7. How do I know if a food product contains added vitamin D?

You can check the food label on the product package. Kindly note that:

1. The list of ingredients should include vitamin D if it is added to the product;
2. Some products would show the amount of vitamin D on the nutrition label;
3. Some products would show nutrition claims about vitamin D on the packaging.

Reference:

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