

5 Dietary Supplements

For the purposes of this survey, dietary supplements were products the participant considered or intended 'as a supplement to their diet'. This included both prescribed and self-selected supplements in a variety of forms, such as tablets, capsules, powders and liquid preparations. Supplements included, individually or in combination: vitamins, minerals, herbal and botanical preparations, oils such as 'fish oil', and products providing glucosamine and/or chondroitin.

Participants were asked to recall the supplements they had consumed at any time in the past year. Details of each supplement were recorded using the product container whenever possible to enable a detailed description. For each supplement the frequency with which it was consumed was also recorded. Using label information and/or website product information, supplements were grouped into the following categories:

- oils – includes fish oils, omega 3 products (alone or plus omega 6 and 9), flax/linseed oil, evening primrose oil
- multi-vitamins and multi-minerals
- herbal-plus (vitamin and/or mineral) – includes echinacea plus vitamin C, ginkgo plus multi-vitamins/multi-minerals, nettle plus B vitamins and iron
- single vitamin
- single mineral
- botanicals – includes garlic, echinacea, ginkgo, ginseng, guarana; plant extracts (from, eg, parsley, thistle, hops, motherwort); roots (of, eg, ginger, gentian, black cohosh); seaweeds and algae (eg, kelp, spirulina)
- multi-vitamins
- multi-minerals
- glucosamine/chondroitin
- bee products
- sport supplements
- weight management
- 'other supplements' – includes green mussel powder, co-enzyme Q10, deer velvet, colloidal silver, freeze-dried stag blood.

Participants were considered *Regular* users if they had consumed at least one supplement: daily, more than once per week or once per week. Any consumption less than once per week was classified as *Occasional* use.

All survey respondents were asked whether they took any supplements at any time during the last 12 months.

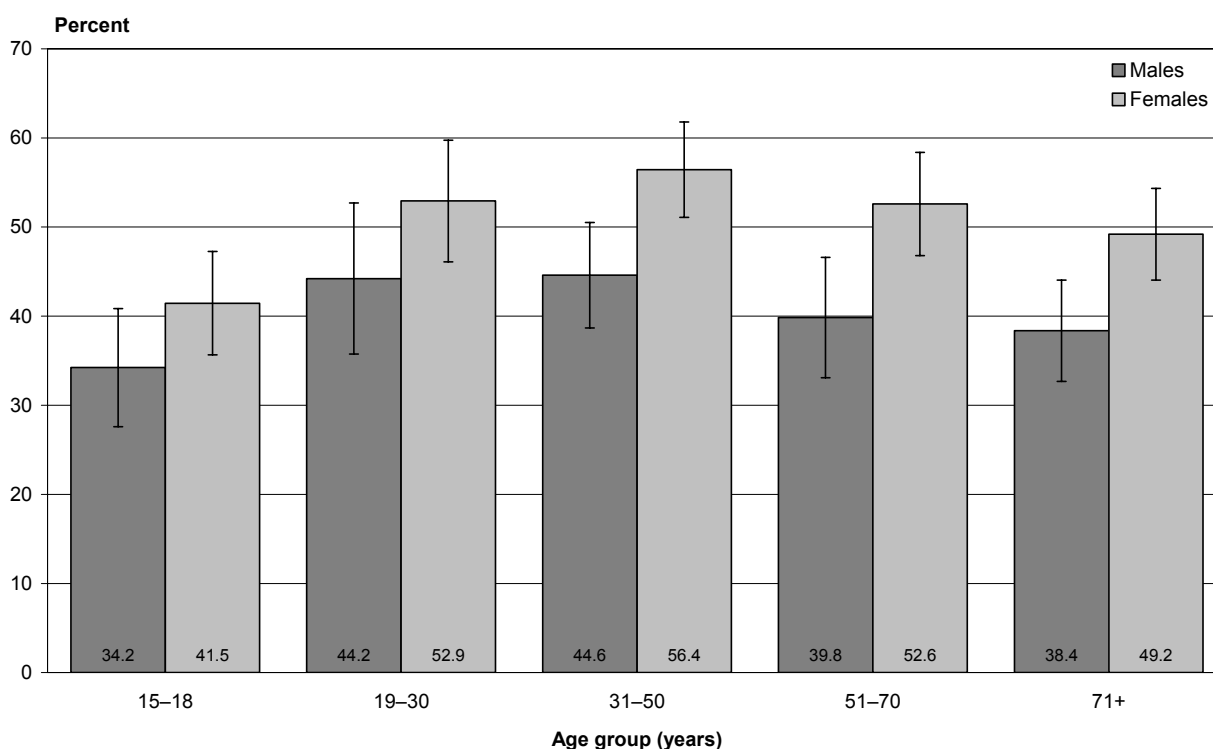
If yes, then the type of supplement was recorded: multi-vitamins and multi-minerals, multi-vitamins, multi-minerals, single vitamin and/or single mineral, oil, other supplement.

5.1 Use in the last year

Any supplement use in the last year was reported by 47.6% of New Zealanders aged 15 years and over, although the proportion was higher for females (53.0%) than for males (41.9%) (Table 5.1). Of the total population, 30.7% were *Regular* users (males 25.5%; females 35.5%). A further 16.9% were *Occasional* users (males 16.4%; females 17.4%).

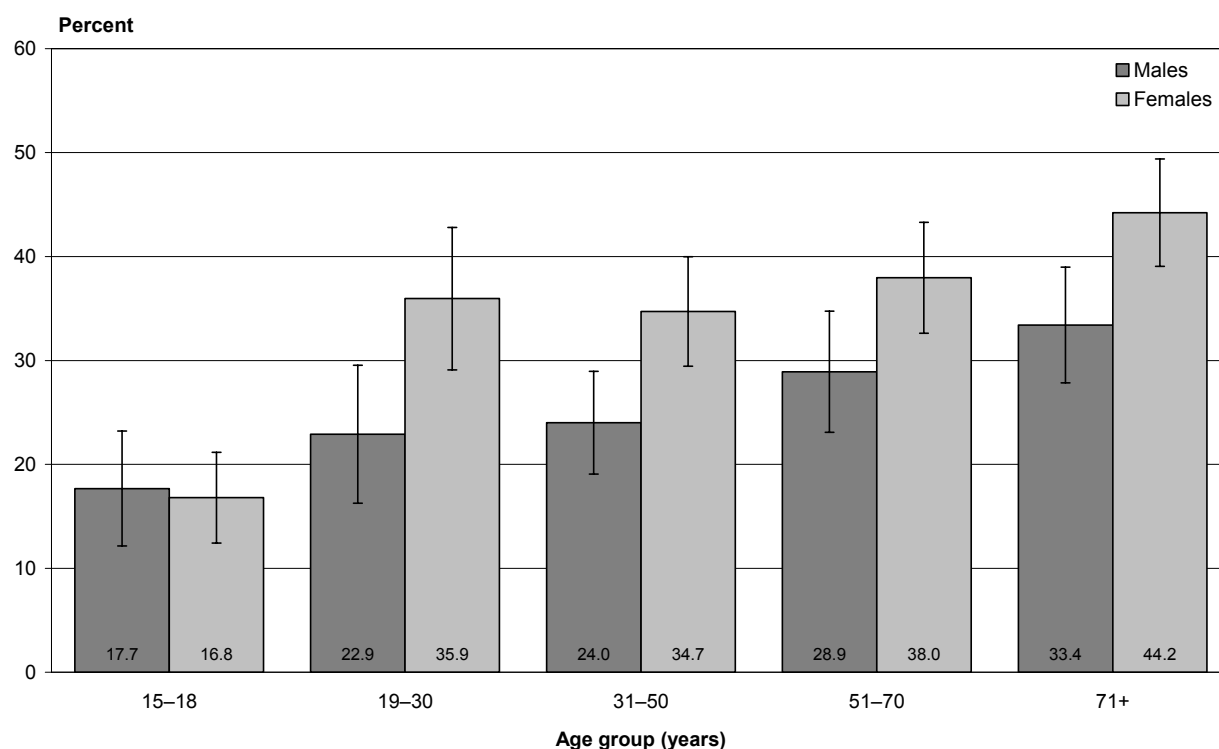
Among females, those aged 31–50 years were more likely to report *Any* supplement use than those aged 15–18 years (56.4% versus 41.5%) (Figure 5.1).

Figure 5.1: Percent *Any* supplement use, by age group and sex



Among males, those aged 71+ years were more often *Regular* users than males aged 15–18 years (33.4% versus 17.7%) (Figure 5.2). Among females, *Regular* use increased with age, from 16.8% for those aged 15–18 years to 44.2% for those aged 71+ years.

Figure 5.2: Percent *Regular* supplement use, by age group and sex



In contrast, *Occasional* use was higher among younger males and females. Older males and females (71+ years) were less likely to be *Occasional* users than males aged 31–50 years and all younger females.

There were no differences in *Any* supplement use in the last year reported across age groups among Māori or Pacific males and females.

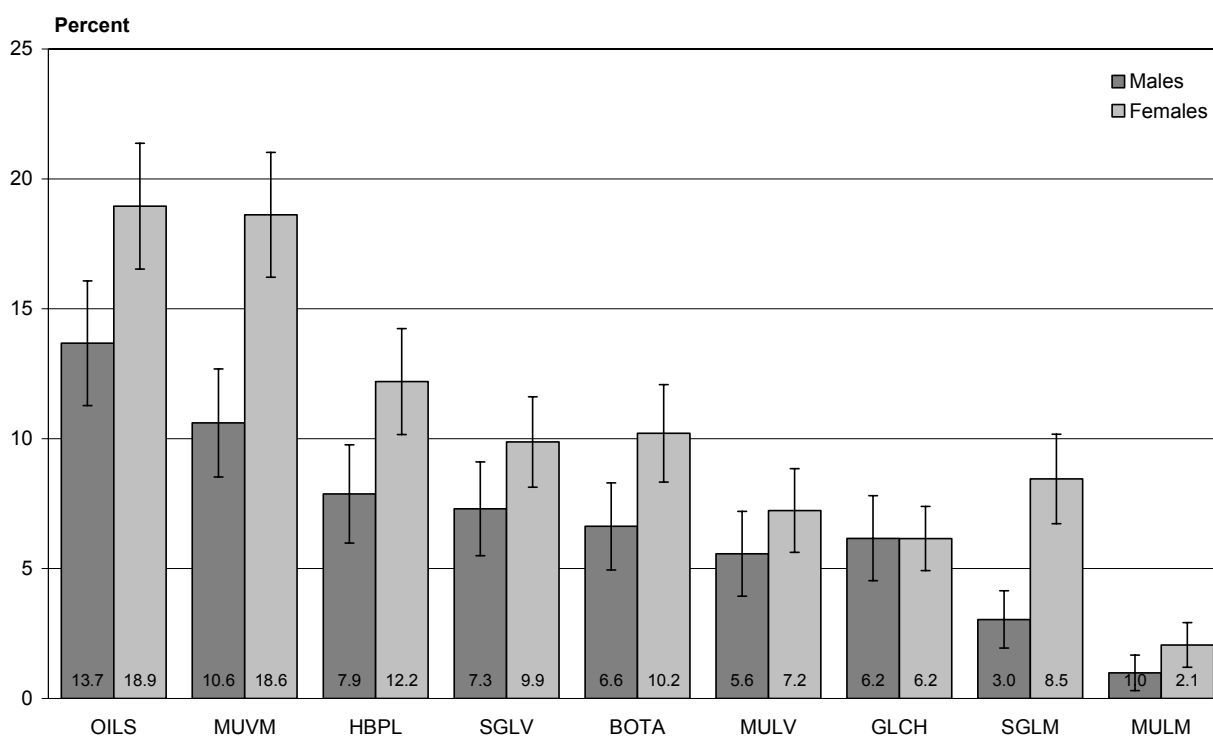
For females (but not males), *Any* supplement use in the last year was reported more often by those in NZDep2006 quintiles 1, 2 and 3 than by those in NZDep2006 quintile 5. Overall, *Any* supplement use in the last year decreased with increasing neighbourhood deprivation, after adjusting for age, sex and ethnic group.

5.2 Types of supplements consumed

The most frequently consumed supplements were oils at 16.4% (males 13.7%; females 18.9%) and multi-vitamins/multi-minerals at 14.8% (males 10.6%; females 18.6%). Herbal-plus supplements were consumed by 10.1% of the population (males 7.9%; females 12.2%), followed by single vitamins (8.6%), botanicals (8.5%), multi-vitamins (6.4%), glucosamine/chondroitin (6.2%), single minerals (5.8%) and multi-minerals (1.5%) (Figure 5.3).

Oils, multi-vitamins/multi-minerals, herbal-plus supplements, botanicals and single minerals were all consumed more frequently by females than by males. Sports supplements were consumed more frequently by males than by females.

Figure 5.3: Types of supplements, by sex



Note: OILS = oils; MUVM = multi-mineral and multi-vitamin; HBPL = herbal-plus; SGLV = single vitamin; BOTA = botanicals; MULV = multi-vitamin; GLCH = glucosamine/chondroitin; SGLM = single mineral; MULM = multi-mineral.

Oils

Younger females aged 15–18 years were less likely to consume oils than females aged 31+ years. Females living in NZDep2006 quintile 5 were less likely to consume oils than those in NZDep2006 quintiles 1–3.

Multi-vitamins/multi-minerals

Frequency of use of this category of supplement among men did not vary with age. However, older (71+ years) females consumed these supplements less often than those in the middle years (31–50 years). There were no differences across quintiles of neighbourhood deprivation for males or females.

Herbal-plus

Frequency of use of this category of supplement did not vary with age among men, but for females those aged 71+ years (7.4%) consumed them less often than those aged 31–50 years (15.4%). For females, those in NZDep2006 quintile 5 (7.6%) consumed this category less often than those in NZDep2006 quintile 2 (17.2%).

Single vitamins

Frequency of use by males did not vary across age groups, but females aged 71+ years (5.5%) consumed them less frequently than females aged 31–50 years (11.6%). Among females, those living in NZDep2006 quintile 5 consumed them less frequently than those in NZDep2006 quintiles 2–4.

Botanicals

Frequency of use by males did not vary across age groups. Females aged 15–18 years consumed botanicals less frequently than females aged 31–50 years. There were no differences for females or males across NZDep2006 quintiles.

Multi-vitamins

Frequency of use by males aged 71+ years (2.2%) was less than for men aged 31–50 years (7.1%). There were no differences across age groups for females, or across NZDep2006 quintiles for males or females.

Glucosamine/chondroitin

This category of supplements was consumed more frequently by older age groups. Among males, those aged 71+ years consumed them more frequently than males aged 15–50 years. Among females, those aged 51+ years consumed them more frequently than did all younger females. There were no differences in the use of this category of supplements across NZDep2006 quintiles.

Single minerals

There were no differences across age groups for males or females. Males living in NZDep2006 quintile 5 (0.5%) consumed single minerals less frequently than males living in NZDep2006 quintile 3 (5.9%). Females living in NZDep2006 quintile 4 consumed single minerals less frequently than those in all other NZDep2006 quintiles.

Multi-minerals

Males aged 51–70 years consumed multi-minerals more frequently than males aged 15–30 years, but there were no differences across age groups among females. Females living in NZDep2006 quintile 2 (3.8%) consumed multi-minerals more frequently than those living in NZDep2006 quintile 5 (0.6%).

Table 5.1: Dietary supplement use, by age group, ethnic group, NZDep2006 and sex

		Frequency of supplement use (%), (95% CI)		
		Consumers in last year ¹	Regular ²	Occasional ³
Total population		47.6 (45.3–50.0)	30.7 (28.6–32.8)	16.9 (15.2–18.7)
By age group (years)				
Males	15–18	34.2 (27.6–40.9)	17.7 (12.2–23.2)	16.5 (12.3–20.8)
	19–30	44.2 (35.7–52.7)	22.9 (16.3–29.5)	21.3 (14.6–28.1)
	31–50	44.6 (38.7–50.5)	24.0 (19.1–29.0)	20.6 (15.7–25.5)
	51–70	39.8 (33.1–46.6)	28.9 (23.1–34.7)	10.9 (6.6–15.3)
	71+	38.4 (32.7–44.1)	33.4 (27.9–39.0)	5.0 (2.1–7.8)
	Total	41.9 (38.4–45.3)	25.5 (22.5–28.4)	16.4 (13.8–19.0)
Females	15–18	41.5 (35.6–47.3)	16.8 (12.4–21.2)	24.6 (19.6–29.7)
	19–30	52.9 (46.1–59.8)	35.9 (29.1–42.8)	17.0 (11.5–22.5)
	31–50	56.4 (51.1–61.8)	34.7 (29.4–40.0)	21.7 (17.5–25.9)
	51–70	52.6 (46.8–58.4)	38.0 (32.6–43.3)	14.6 (10.3–19.0)
	71+	49.2 (44.1–54.3)	44.2 (39.0–49.4)	5.0 (2.9–7.1)
	Total	53.0 (49.8–56.1)	35.5 (32.6–38.5)	17.4 (15.1–19.8)
Māori				
Males	15–18	20.6 (6.0–35.1)	10.3 (1.3–32.4)	10.2 (2.6–17.9)
	19–30	24.0 (11.3–36.8)	8.2 (2.5–13.9)	15.8 (3.4–28.3)
	31–50	37.7 (27.6–47.8)	23.0 (13.4–32.5)	14.7 (6.8–22.7)
	51+	36.6 (23.3–49.9)	23.5 (12.3–34.7)	13.1 (1.8–24.3)
	Total	31.4 (25.1–37.7)	17.3 (12.1–22.5)	14.1 (8.9–19.2)
Females	15–18	30.6 (16.3–44.8)	10.2 (2.2–26.6)	20.4 (8.8–32.1)
	19–30	42.2 (31.8–52.6)	24.9 (13.6–36.2)	17.3 (10.8–23.8)
	31–50	39.7 (32.0–47.4)	21.5 (13.1–29.9)	18.2 (11.8–24.6)
	51+	34.2 (25.2–43.2)	24.3 (15.6–33.0)	9.9 (3.5–16.2)
	Total	38.2 (33.1–43.2)	21.7 (16.8–26.7)	16.4 (12.9–20.0)
Pacific				
Males	15–18	29.4 (11.9–46.9)	11.4 (0.3–22.5)	17.9 (3.3–32.5)
	19–30	20.6 (11.0–30.1)	11.4 (4.6–18.3)	9.1 (2.5–15.8)
	31–50	17.4 (10.2–24.5)	9.1 (4.3–13.8)	8.3 (2.8–13.8)
	51+	12.3 (3.7–20.8)	3.0 (0.4–9.8)	9.3 (1.5–17.1)
	Total	19.0 (13.9–24.2)	8.9 (5.6–12.3)	10.1 (6.2–14.0)
Females	15–18	15.2 (3.0–27.4)	7.7 (1.3–22.6)	7.5 (1.3–21.5)
	19–30	17.1 (10.1–24.1)	9.9 (4.1–15.7)	7.2 (2.4–12.0)
	31–50	22.8 (15.9–29.7)	13.8 (7.9–19.6)	9.0 (4.4–13.7)
	51+	14.8 (6.7–22.9)	12.2 (5.3–19.0)	2.6 (0.1–13.7)
	Total	18.6 (14.4–22.7)	11.5 (8.1–15.0)	7.0 (4.2–9.8)

		Frequency of supplement use (%), (95% CI)		
		Consumers in last year ¹	Regular ²	Occasional ³
NZEO				
Males	15–18	38.8 (31.4–46.2)	20.3 (13.8–26.9)	18.4 (13.6–23.2)
	19–30	49.1 (39.5–58.7)	25.0 (17.4–32.7)	24.0 (16.3–31.8)
	31–50	47.8 (41.1–54.4)	25.3 (19.8–30.9)	22.4 (16.9–28.0)
	51+	41.0 (35.4–46.6)	31.5 (26.5–36.5)	9.5 (5.9–13.0)
	Total	44.8 (41.0–48.7)	27.3 (24.0–30.5)	17.6 (14.7–20.5)
Females	15–18	45.1 (38.7–51.5)	18.9 (13.9–24.0)	26.2 (20.6–31.8)
	19–30	57.9 (50.0–65.9)	40.0 (32.1–48.0)	17.9 (11.4–24.4)
	31–50	60.4 (54.3–66.6)	37.5 (31.5–43.5)	22.9 (18.2–27.7)
	51+	53.7 (48.9–58.5)	41.4 (36.9–46.0)	12.3 (8.8–15.8)
	Total	56.4 (53.0–59.9)	38.2 (35.0–41.5)	18.2 (15.5–20.8)
By NZDep2006 quintile				
Males	1	46.9 (38.2–55.5)	25.4 (18.3–32.6)	21.4 (14.6–28.3)
	2	44.0 (36.1–51.8)	30.3 (23.4–37.2)	13.7 (8.6–18.8)
	3	43.6 (36.0–51.2)	24.8 (17.9–31.6)	18.9 (12.9–24.8)
	4	40.9 (33.4–48.5)	27.7 (21.3–34.1)	13.2 (8.2–18.2)
	5	31.9 (25.0–38.8)	18.4 (13.7–23.1)	13.5 (8.2–18.8)
Females	1	54.2 (47.1–61.3)	37.2 (30.3–44.0)	17.0 (11.0–23.1)
	2	59.7 (52.4–67.0)	39.8 (33.1–46.6)	19.8 (14.7–24.9)
	3	59.5 (51.5–67.6)	41.3 (33.8–48.9)	18.2 (12.4–23.9)
	4	50.3 (43.8–56.8)	33.6 (27.3–39.8)	16.7 (11.7–21.8)
	5	39.1 (33.2–45.0)	24.4 (19.6–29.2)	14.7 (10.4–19.0)

1 Any consumption over the past year.

2 At least one supplement consumed daily, more than once per week or once per week.

3 Any consumption less than once per week.

Table 5.2: Prevalence of use by type of dietary supplement,¹ by age group, ethnic group, NZDep2006 and sex

	Age	OILS	MUVM	HBPL	SGLV	BOTA	MULV	GLCH	SGLM	OTHER	MULM	SPTS	WMGT	BEEP
Total population		16.4 (14.8–18.2)	14.8 (13.2–16.4)	10.1 (8.6–11.7)	8.6 (7.4–10.0)	8.5 (7.1–10.0)	6.4 (5.3–7.7)	6.2 (5.2–7.3)	5.8 (4.9–7.0)	5.8 (4.8–6.8)	1.5 (1.0–2.2)	1.9 (1.4–2.5)	1.2 (0.7–1.6)	0.7 (0.3–1.0)
Males	15–18	10.6 (5.9–17.3)	8.1 (4.7–12.7)	6.0 (1.5–15.0)	5.8 (3.4–8.9)	4.4 (1.7–8.9)	3.8 (1.9–6.8)	0.3 (0.0–1.2)	2.1 (0.7–4.8)	4.2 (1.7–8.7)	0.0	6.2 (3.2–10.8)	0.0	0.0
	19–30	8.7 (4.4–15.0)	11.9 (7.2–18.1)	7.4 (3.8–12.7)	8.5 (4.5–14.2)	5.7 (2.4–11.0)	4.8 (1.9–9.7)	3.9 (1.2–9.2)	2.6 (0.4–7.8)	3.5 (1.2–7.7)	0.1 (0.0–0.3)	5.9 (2.8–10.7)	1.6 (0.3–5.0)	0.0
	31–50	14.1 (10.1–18.8)	12.7 (8.9–17.3)	8.4 (5.4–12.5)	8.4 (5.4–12.2)	6.7 (4.0–10.3)	7.1 (4.4–10.8)	4.1 (2.0–7.4)	1.8 (0.5–4.2)	3.6 (1.7–6.5)	0.6 (0.0–2.9)	2.6 (1.3–4.8)	1.5 (0.5–3.3)	0.8 (0.1–2.9)
	51–70	15.9 (11.0–21.8)	8.1 (5.0–12.3)	8.7 (5.2–13.3)	6.5 (3.5–10.7)	7.4 (4.3–11.7)	5.8 (3.0–9.8)	10.0 (6.5–14.4)	4.1 (1.9–7.5)	8.2 (4.7–13.0)	2.2 (0.7–5.2)	1.0 (0.1–3.9)	0.3 (0.0–1.1)	0.1 (0.0–0.3)
	71+	19.4 (14.2–25.5)	9.3 (5.3–14.7)	6.0 (3.3–10.0)	4.1 (2.5–6.3)	8.3 (4.5–13.9)	2.2 (1.1–3.7)	13.0 (8.2–19.4)	6.7 (4.1–10.3)	5.9 (3.2–9.9)	2.0 (0.2–6.6)	0.0	0.1 (0.0–0.7)	2.2 (0.8–4.9)
	Total	13.7 (11.3–16.3)	10.6 (8.6–12.9)	7.9 (6.1–10.0)	7.3 (5.6–9.3)	6.6 (5.0–8.5)	5.6 (4.0–7.4)	6.2 (4.6–8.0)	3.0 (2.0–4.4)	5.1 (3.7–6.4)	1.0 (0.4–2.0)	2.9 (1.9–4.0)	0.9 (0.4–1.8)	0.5 (0.2–1.2)
	Females	15–18	6.9 (4.4–10.3)	13.7 (10.2–18.0)	11.5 (7.9–16.0)	8.3 (5.4–12.2)	5.2 (2.9–8.4)	4.0 (2.2–6.6)	0.4 (0.0–1.5)	5.4 (3.2–8.4)	4.4 (2.3–7.4)	0.7 (0.1–2.3)	0.8 (0.2–2.4)	2.2 (0.4–6.3)
19–30		14.3 (9.4–20.4)	20.5 (14.9–27.1)	11.6 (7.0–17.7)	8.3 (4.7–13.4)	8.0 (3.9–14.2)	10.1 (5.9–15.9)	0.1 (0.0–0.3)	10.3 (5.9–16.4)	6.1 (3.0–11.0)	1.1 (0.2–3.4)	1.6 (0.2–5.6)	2.1 (0.5–5.5)	0.1 (0.0–0.3)
31–50		17.9 (13.7–22.7)	22.0 (17.6–26.9)	15.4 (11.6–19.9)	11.6 (8.5–15.4)	11.9 (8.7–15.7)	7.5 (4.9–10.8)	3.4 (1.7–6.1)	8.1 (5.2–11.8)	6.0 (3.4–9.8)	1.7 (0.6–3.8)	1.2 (0.5–2.5)	1.5 (0.5–3.3)	0.5 (0.1–1.4)
51–70		24.8 (20.0–30.1)	16.2 (12.3–20.8)	10.1 (6.8–14.4)	10.7 (7.2–15.0)	11.5 (8.1–15.7)	5.4 (3.1–8.8)	12.5 (9.2–16.4)	7.8 (5.1–11.2)	7.4 (4.2–10.6)	4.0 (1.9–7.2)	0.7 (0.2–2.1)	0.8 (0.2–2.1)	2.1 (0.7–4.6)
71+		24.9 (20.3–30.0)	12.2 (8.5–16.7)	7.4 (5.3–9.9)	5.5 (3.7–8.0)	8.4 (5.9–11.5)	7.7 (4.4–12.3)	15.4 (10.9–20.8)	9.9 (7.3–13.1)	7.4 (5.1–9.7)	1.1 (0.4–2.1)	0.2 (0.0–0.8)	0.4 (0.1–1.2)	0.7 (0.2–1.6)
Total		18.9 (16.6–21.5)	18.6 (16.3–21.2)	12.2 (10.2–14.4)	9.9 (8.2–11.8)	10.2 (8.4–12.2)	7.2 (5.7–9.0)	6.2 (5.0–7.5)	8.5 (6.8–10.4)	6.4 (4.8–8.1)	2.1 (1.3–3.1)	1.0 (0.5–1.8)	1.4 (0.7–2.1)	0.8 (0.4–1.5)
Māori														
Male	15–18	9.2 (0.7–32.5)	13.1 (2.8–33.4)	2.4 (0.2–9.1)	2.8 (0.2–10.6)	8.6 (0.2–33.8)	1.0 (0.0–6.4)	0.0	0.0	8.4 (0.4–34.4)	0.0	1.4 (0.0–7.8)	0.0	0.0
	19–30	1.0 (0.0–6.1)	11.7 (2.5–30.2)	3.9 (1.0–10.3)	1.2 (0.1–4.7)	3.5 (0.7–9.8)	0.6 (0.0–3.8)	0.0	0.0	0.7 (0.0–3.7)	0.4 (0.0–2.3)	6.7 (2.4–14.4)	2.8 (0.5–8.6)	0.0
	31–50	10.9 (3.9–22.8)	8.1 (2.7–17.7)	8.8 (2.5–20.6)	4.8 (1.9–9.8)	2.2 (0.7–5.2)	6.4 (2.0–14.9)	1.0 (0.1–3.9)	1.3 (0.2–3.9)	5.1 (1.4–12.6)	0.0	8.2 (3.3–16.3)	0.7 (0.1–2.6)	0.0
	51+	9.5 (3.8–19.0)	11.9 (4.0–25.3)	5.8 (0.7–18.3)	3.3 (0.7–9.0)	2.6 (0.6–6.7)	4.8 (0.6–15.3)	10.0 (2.1–25.7)	1.7 (0.1–6.5)	6.8 (0.6–24.4)	0.6 (0.0–3.4)	0.0	1.2 (0.1–4.1)	0.5 (0.0–2.7)
	Total	7.7 (4.0–13.1)	10.6 (6.1–16.7)	6.0 (2.9–10.7)	3.2 (1.7–5.4)	3.5 (1.4–7.0)	3.8 (1.6–7.3)	2.5 (0.7–6.3)	0.8 (0.2–2.1)	4.7 (2.1–9.0)	0.2 (0.0–0.9)	5.1 (2.9–8.3)	1.3 (0.5–2.8)	0.1 (0.0–0.6)

	Age	OILS	MUVM	HBPL	SGLV	BOTA	MULV	GLCH	SGLM	OTHER	MULM	SPTS	WMGT	BEEP
Female	15-18	2.7 (0.3-9.2)	4.9 (1.0-13.3)	5.6 (1.5-13.4)	9.3 (1.6-26.2)	1.0 (0.0-6.4)	2.3 (0.2-8.5)	0.0	4.3 (0.9-11.7)	2.6 (0.1-13.7)	0.0	0.0	4.2 (0.1-21.5)	0.0
	19-30	7.2 (2.5-15.4)	18.2 (9.6-29.8)	10.8 (3.9-22.4)	6.0 (3.1-10.3)	1.7 (0.4-4.4)	8.5 (1.5-23.7)	0.4 (0.0-2.2)	6.6 (3.4-11.3)	3.1 (1.2-6.5)	0.4 (0.0-2.0)	4.1 (0.1-21.4)	3.3 (0.3-11.9)	0.4 (0.0-2.0)
	31-50	9.0 (5.3-14.1)	10.8 (6.5-16.5)	13.7 (6.3-24.7)	3.7 (1.4-7.8)	9.3 (5.2-14.9)	4.3 (2.3-7.3)	1.3 (0.0-6.2)	3.8 (1.4-8.0)	3.0 (0.9-7.3)	2.0 (0.3-6.1)	0.6 (0.1-2.3)	1.1 (0.2-3.4)	0.9 (0.2-2.7)
	51+	10.3 (3.9-20.8)	2.7 (0.6-7.7)	5.9 (1.2-15.6)	6.9 (1.2-19.7)	2.4 (0.5-6.7)	6.2 (2.3-13)	6.5 (2.0-14.9)	3.8 (1.3-8.6)	1.5 (0.3-4.5)	2.5 (0.1-11.1)	0.6 (0.0-3.4)	0.5 (0.0-2.8)	0.0
	Total	8.0 (5.4-11.3)	10.5 (7.2-14.6)	10.3 (6.3-15.7)	5.7 (3.4-8.8)	4.7 (3.0-7.0)	5.6 (3.1-9.4)	2.0 (0.8-4.2)	4.6 (3.0-6.8)	2.7 (1.5-4.5)	1.4 (1.0-3.4)	1.5 (0.1-6.0)	1.9 (0.6-4.5)	0.5 (0.1-1.2)
Pacific														
Males	15-18	12.0 (2.1-32.2)	5.9 (0.4-21.2)	0.0	0.0	0.0	0.0	0.0	0.0	2.5 (0.1-13.1)	0.0	8.9 (1.9-23.8)	0.0	0.0
	19-30	2.0 (0.1-7.5)	4.3 (1.0-11.1)	3.7 (0.9-9.7)	2.3 (0.2-8.9)	1.8 (0.1-6.7)	2.6 (0.2-9.8)	0.0	0.0	1.7 (0.2-6.0)	0.7 (0.0-4.3)	7.4 (3.0-14.8)	1.4 (0.0-7.8)	0.0
	31-50	5.6 (1.6-13.6)	2.3 (0.7-5.4)	2.2 (0.3-7.1)	3.1 (1.0-7.0)	1.8 (0.3-5.5)	2.5 (0.7-5.8)	2.2 (0.3-7.1)	0.8 (0.0-5.1)	0.6 (0.0-3.3)	0.6 (0.0-3.6)	1.9 (0.5-4.8)	0.9 (0.1-3.3)	0.0
	51+	1.3 (0.1-5.2)	3.4 (0.2-12.4)	1.6 (0.0-9.7)	6.5 (1.4-17.6)	0.0	0.0	2.7 (0.2-9.9)	0.0	0.4 (0.0-4.9)	0.0	0.0	0.0	0.9 (0.0-4.9)
	Total	4.6 (2.1-8.5)	3.6 (1.8-6.3)	2.2 (0.8-4.9)	3.1 (1.4-5.8)	1.2 (0.4-2.7)	1.7 (0.6-3.7)	1.3 (0.4-3.3)	0.3 (0.0-1.9)	1.2 (0.3-2.9)	0.4 (0.0-1.6)	4.2 (2.2-7.0)	0.8 (0.1-2.5)	0.2 (0.0-1.0)
Females	15-18	4.2 (0.0-23)	6.0 (0.4-22.0)	7.6 (0.6-26.1)	0.0	3.4 (0.0-19.2)	2.4 (0.0-13.8)	0.0	3.4 (0.2-12.6)	7.6 (0.9-24.7)	4.2 (0.0-23.0)	0.0	0.0	0.0
	19-30	2.2 (0.4-6.4)	4.3 (1.3-9.9)	4.0 (0.8-10.9)	4.7 (1.3-11.5)	2.1 (0.1-7.8)	2.5 (0.4-7.4)	0.0	6.1 (2.3-12.9)	0.7 (0.0-3.9)	0.7 (0.0-4.4)	0.7 (0.0-3.9)	0.7 (0.0-3.9)	0.0
	31-50	4.7 (2.2-8.7)	6.3 (3.1-11.3)	2.5 (0.6-6.5)	1.9 (0.5-4.8)	3.2 (1.1-7.0)	3.8 (1.5-7.9)	1.0 (0.1-3.9)	5.5 (2.2-11.4)	0.5 (0.0-2.8)	0.0	2.9 (0.4-10.0)	1.5 (0.1-5.7)	0.5 (0.0-2.6)
	51+	7.7 (2.7-16.3)	3.5 (0.6-10.5)	2.3 (0.2-8.8)	2.6 (0.1-13.7)	1.1 (0.0-5.7)	0.0	1.8 (0.0-9.6)	2.2 (0.2-8.4)	0.0	0.0	0.0	0.0	0.0
	Total	4.5 (2.6-7.2)	5.1 (3.1-7.8)	3.5 (1.7-6.4)	2.6 (1.1-5.1)	2.5 (1.2-4.6)	2.5 (1.2-4.4)	0.7 (0.1-2.3)	4.8 (2.8-7.6)	1.4 (0.3-3.6)	0.7 (0.1-3.0)	1.3 (0.2-4.0)	0.8 (0.1-2.4)	0.2 (0.0-1.0)

	Age	OILS	MUVM	HBPL	SGLV	BOTA	MULV	GLCH	SGLM	OTHER	MULM	SPTS	WMGT	BEEP
NZEO														
Males	15-18	12.1 (6.4-20.2)	8.7 (4.9-14.2)	7.4 (2.1-17.9)	7.1 (4.3-10.9)	5.4 (2.1-11.0)	4.7 (2.3-8.4)	0.4 (0.1-1.5)	2.6 (0.9-5.9)	5.0 (1.9-10.3)	0.0	6.6 (3.0-12.4)	0.0	0.0
	19-30	10.0 (5.0-17.4)	13.3 (7.9-20.6)	8.4 (4.3-14.5)	9.9 (5.3-16.7)	6.3 (2.5-12.7)	5.3 (2.0-11.0)	4.6 (1.4-10.7)	3.1 (0.5-9.1)	4.0 (1.3-8.9)	0.0	5.7 (2.3-11.5)	1.4 (0.1-5.7)	0.0
	31-50	14.8 (10.4-20.1)	14.0 (9.7-19.3)	8.8 (5.4-13.2)	9.3 (5.9-13.7)	7.3 (4.3-11.4)	7.5 (4.5-11.6)	4.6 (2.2-8.4)	1.9 (0.5-4.8)	3.7 (1.7-7.0)	0.6 (0.0-3.7)	2.3 (1.0-4.4)	1.6 (0.5-3.7)	0.9 (0.1-3.3)
	51+	17.7 (13.4-22.7)	8.7 (5.9-12.2)	8.3 (5.5-12.0)	6.0 (3.6-9.4)	8.1 (5.3-11.7)	5.1 (2.9-8.3)	11.3 (8.1-15.1)	5.0 (3.1-7.6)	8.1 (5.0-11.3)	2.3 (0.9-4.7)	0.8 (0.1-3.2)	0.2 (0.0-0.9)	0.6 (0.2-1.4)
	Total	14.7 (12.1-17.7)	11.5 (9.2-14.1)	8.4 (6.5-10.7)	8.0 (6.1-10.3)	7.3 (5.5-9.4)	6.0 (4.3-8.1)	6.8 (5.1-8.9)	3.4 (2.2-4.8)	5.5 (3.9-7.1)	1.1 (0.4-2.2)	2.7 (1.6-3.8)	0.9 (0.4-1.9)	0.6 (0.2-1.3)
	Females	15-18	7.7 (4.9-11.4)	14.9 (10.9-19.8)	12.9 (8.7-18.0)	9.2 (5.8-13.6)	5.9 (3.2-9.6)	4.2 (2.1-7.3)	0.5 (0.0-1.8)	6.2 (3.6-9.7)	4.1 (2.0-7.1)	0.4 (0.0-1.5)	0.9 (0.2-2.8)	1.6 (0.2-5.7)
19-30	16.4 (10.6-23.7)	22.7 (16.0-30.6)	13.4 (8.0-20.7)	8.9 (4.6-15.2)	9.4 (4.5-16.8)	10.4 (5.7-17.2)	0.0	11.2 (5.9-18.7)	7.1 (3.3-12.9)	1.3 (0.2-4.0)	2.0 (0.3-6.7)	2.0 (0.4-6.1)	0.1 (0.0-0.4)	
31-50	19.8 (15.1-25.3)	24.1 (19.0-29.6)	16.8 (12.4-21.9)	13.0 (9.5-17.2)	12.6 (9.0-17.0)	8.0 (5.1-11.9)	3.8 (1.8-6.8)	8.8 (5.6-13.2)	6.5 (3.5-11.0)	1.8 (0.6-4.2)	1.1 (0.3-2.7)	1.5 (0.5-3.7)	0.5 (0.1-1.6)	
51+	26.3 (22.2-30.7)	16.0 (12.9-19.5)	9.7 (7.1-13.0)	9.8 (7.0-13.2)	11.3 (8.6-14.5)	6.1 (3.8-9.4)	14.1 (11.3-17.3)	8.7 (6.5-11.4)	8.0 (5.3-10.6)	3.4 (1.8-5.8)	0.6 (0.1-1.6)	0.7 (0.2-1.7)	1.8 (0.7-3.7)	
Total	20.8 (18.2-23.7)	20.1 (17.4-23.0)	13.2 (11.0-15.7)	10.8 (8.9-12.9)	11.1 (9.0-13.4)	7.5 (5.8-9.5)	6.8 (5.5-8.4)	9.1 (7.2-11.2)	7.0 (5.1-8.9)	2.2 (1.4-3.4)	1.1 (0.5-1.9)	1.3 (0.7-2.3)	0.9 (0.4-1.6)	
NZDep2006														
Males	1	19.4 (13.2-26.9)	9.0 (5.1-14.6)	9.2 (5.1-15.0)	7.8 (4.1-13.4)	7.7 (4.5-12.1)	8.0 (4.2-13.4)	6.9 (3.8-11.4)	2.9 (1.1-6.0)	5.4 (2.6-9.7)	0.7 (0.0-3.4)	2.5 (1.0-5.0)	0.0	0.9 (0.0-4.4)
	2	11.9 (7.6-17.4)	13.2 (8.4-19.3)	9.8 (6.0-14.8)	10.1 (5.7-16.4)	7.1 (3.7-12.0)	5.3 (2.1-10.7)	6.6 (3.7-10.7)	3.2 (1.0-7.5)	5.3 (2.7-9.4)	1.6 (0.2-5.5)	4.4 (1.7-9.1)	1.3 (0.1-4.6)	0.1 (0.0-0.5)
	3	11.7 (7.0-17.9)	11.2 (6.7-17.3)	9.1 (4.9-15.1)	8.4 (4.6-13.9)	6.2 (2.8-11.7)	5.5 (2.6-10.0)	8.6 (4.2-15.1)	5.9 (3.0-10.1)	4.0 (1.6-8.2)	1.3 (0.2-4.5)	4.1 (1.5-8.8)	1.4 (0.2-4.9)	1.1 (0.3-2.8)
	4	13.6 (9.1-19.2)	9.0 (5.4-13.9)	5.2 (2.1-10.4)	5.2 (2.8-8.7)	9.3 (5.2-14.9)	5.1 (2.5-9.0)	5.4 (2.6-9.6)	2.4 (0.7-5.6)	6.6 (3.3-11.6)	1.3 (0.2-4.0)	1.2 (0.4-2.8)	1.2 (0.3-3.3)	0.1 (0.0-0.3)
	5	10.6 (6.8-15.6)	10.6 (6.6-15.9)	5.3 (2.4-10.0)	4.2 (2.2-7.0)	2.4 (0.8-5.5)	3.4 (1.2-7.4)	2.8 (1.0-5.9)	0.5 (0.1-1.3)	3.9 (1.3-8.8)	0.0	2.2 (1.1-4.1)	1.1 (0.3-2.8)	0.2 (0.0-0.7)

	Age	OILS	MUVM	HBPL	SGLV	BOTA	MULV	GLCH	SGLM	OTHER	MULM	SPTS	WMGT	BEEP
Females	1	24.6 (17.8–32.4)	16.4 (10.9–23.1)	12.8 (8.2–18.6)	10.0 (6.2–14.9)	10.4 (6.2–16.1)	7.3 (4.0–12.2)	7.1 (4.0–11.7)	11.5 (7.2–17.1)	6.0 (2.6–11.4)	1.7 (0.4–4.5)	2.9 (0.9–7.0)	0.5 (0.0–2.3)	1.0 (0.0–5.7)
	2	23.3 (18.4–28.7)	21.5 (16.0–27.8)	17.2 (12.2–23.1)	11.8 (7.8–16.8)	13.3 (9.0–18.7)	6.5 (3.6–10.6)	8.1 (5.3–11.8)	11.4 (7.7–16.1)	7.9 (4.6–11.2)	3.8 (1.6–7.4)	1.2 (0.2–3.6)	1.3 (0.2–3.8)	0.8 (0.2–2.3)
	3	23.6 (17.4–30.6)	19.9 (14.3–26.6)	9.4 (6.0–14.0)	12.6 (8.4–18.0)	9.8 (6.1–14.6)	10.8 (6.5–16.5)	5.7 (3.2–9.2)	9.3 (5.1–15.3)	8.7 (4.4–15.0)	2.7 (0.8–6.4)	0.1 (0.0–0.6)	1.7 (0.3–4.9)	0.9 (0.1–3.2)
	4	13.1 (9.8–17.0)	21.1 (15.7–27.3)	13.4 (9.0–18.9)	9.9 (6.6–14.1)	10.0 (6.4–14.6)	6.3 (3.6–10.0)	5.3 (3.3–8.0)	2.5 (1.6–3.6)	5.2 (2.8–8.9)	1.2 (0.4–2.7)	0.3 (0.1–1.1)	0.6 (0.2–1.5)	0.7 (0.2–1.7)
	5	9.6 (6.8–13.2)	13.1 (9.4–17.5)	7.6 (4.6–11.6)	4.3 (2.6–6.5)	7.0 (3.6–12.0)	5.0 (2.8–8.1)	4.4 (2.6–6.8)	7.6 (4.7–11.4)	3.8 (1.8–7.1)	0.6 (0.1–1.5)	0.9 (0.2–2.4)	2.8 (1.0–6.0)	0.6 (0.1–1.9)

Notes:

OILS = oils; MUVM = multi-mineral and multi-vitamin; HBPL = herbal-plus; SGLV = single vitamin; BOTA = botanicals; MULV = multi-vitamin; GLCH = glucosamine/chondroitin; SGLM = single mineral; MULM = multi-mineral; SPTS = sports; WMGT = weight management; BEEP = bee products.

1 Prevalence of supplement use among the total population aged 15 years and over (includes those who used supplements and those who did not use supplements).