

## Herbal Supplement Sales in US Increase 8.5% in 2017, Topping \$8 Billion

*Strongest sales growth in more than 15 years bolstered by continued popularity of Ayurvedic herbs and new formulations of botanicals with general health and nutrition benefits*

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### Introduction

In 2017, retail sales of herbal dietary supplements in the United States surpassed \$8 billion for the first time, reaching an estimated total of \$8.085 billion. Consumer spending increased by approximately \$633 million, or 8.5%, from 2016 — the strongest US sales growth for herbal supplements in more than 15 years. Total US retail sales have increased every year since 2004, and since then, consumer spending on herbal supplements has nearly doubled.

The information presented in this report is based on retail sales data provided by the market research firms SPINS and IRI, both based in Chicago, Illinois, and the *Nutrition Business Journal* (NBJ), part of the New Hope Network, a Boulder, Colorado-based natural products industry-focused media company owned by Informa. SPINS collaborated with IRI to determine total retail sales of herbal dietary supplements in the mainstream multi-outlet retail channel. NBJ calculated total overall sales of herbal supplements as well as breakdowns by market channel and product type (single-herb vs. combination-herb supplements).

In addition to the overall sales growth for herbal dietary supplements, total retail sales increased in all market channels in 2017, according to NBJ estimates. The strongest growth was seen in direct sales of herbal supplements, which totaled \$4.012 billion in 2017, an 11.2% increase from the previous year. Mass-market retail sales grew by 8.4% to reach an estimated total of \$1.449 billion in 2017, and herbal supplement sales in natural and health food stores, which totaled \$2.624 billion in 2017, increased by 4.7% from the previous year.

The SPINS/IRI sales data for individual herbs discussed in this report, and those listed in Tables 4 and 5, reflect sales of dietary supplements in which that herb is the primary ingredient. This includes only products that meet the legal definition of a dietary supplement per the US Food and Drug Administration.<sup>1</sup> The figures in this report reflect the most current estimates (as of July 2018) for herbal dietary supplement sales during the 52-week period that ended January 1, 2018.

### Mainstream Channel

According to SPINS/IRI data, mainstream multi-outlet retail sales of herbal dietary supplements totaled \$925,935,334 in 2017, a marginal increase of 0.698% from

the previous year. The substantial differences between the mainstream sales totals from SPINS/IRI and NBJ can be explained in part by the organizations' differing channel definitions. SPINS, for example, does not include convenience store sales in its mainstream channel data.

For the fifth consecutive year, horehound (*Marrubium vulgare*, Lamiaceae) was reported as the top-selling herbal dietary supplement ingredient in mainstream US retail outlets. In this channel, horehound supplement sales totaled \$140,832,190 in 2017, a 12.3% increase from 2016. Records of the medicinal use of horehound for respiratory conditions date back to the first century,<sup>2,3</sup> and the herb is still commonly used for its expectorant and cough-suppressant properties, typically in the form of cough drops and lozenges. (However, according to SPINS, one of the top-selling horehound products in 2017 was in the form of a single-herb extract marketed for respiratory health.)

With a 46.7% increase in sales from 2016, turmeric (*Curcuma longa*, Zingiberaceae) experienced the strongest sales growth in the 2017 mainstream retail channel. Consumers spent a total of \$32,456,933 on turmeric supplements in mainstream retail stores in 2017, an increase of roughly \$10.3 million from the previous year. This increase in sales earned turmeric a spot as the fifth top-selling mainstream herbal supplement ingredient, up from its 10th-place rank in 2016.

Consumer interest in turmeric has increased substantially in recent years. In its 2016 Food Trends report, Google classified turmeric as the “breakout star” of the functional food movement from 2011 to 2016, with Google searches for the ingredient increasing by 300% during that time.<sup>4,5</sup>

The rise of this golden spice has coincided with increased consumer familiarity with and interest in Ayurveda, a traditional medicine system of India. In addition to being a widely used food ingredient (e.g., in curries), turmeric has

**Table 1. Total US Retail Sales of Herbal Supplements\***

2000	\$4.225 billion
2001	\$4.361 billion
2002	\$4.275 billion
2003	\$4.146 billion
2004	\$4.288 billion
2005	\$4.378 billion
2006	\$4.558 billion
2007	\$4.756 billion
2008	\$4.800 billion
2009	\$5.037 billion
2010	\$5.049 billion
2011	\$5.302 billion
2012	\$5.593 billion
2013	\$6.033 billion
2014	\$6.441 billion
2015	\$6.922 billion
2016	\$7.452 billion
2017	\$8.085 billion

Source: Nutrition Business Journal

\* Includes sales in all channels. NBJ primary research includes NBJ surveys of supplement manufacturers, distributors, MLM firms, mail order, internet, and raw material and ingredient supply companies, as well as numerous interviews with major retailers (Walmart, Costco, etc.), manufacturers, suppliers, and industry experts. Secondary sources include IRI, SPINSScan Natural, Nielsen, *Natural Foods Merchandiser*, Insight, The Hartman Group, company data, and other published material.

been used medicinally in Ayurveda to address a diverse range of health issues, including ulcers, joint pain, skin conditions, inflammation, respiratory conditions, and kidney and liver disorders, among others.<sup>6</sup>

Turmeric sales may have also benefited from the viral popularity of “wellness tonics,” which Whole Foods named as one of the top 10 food trends of 2017.<sup>7</sup> Golden milk and turmeric lattes, which typically contain turmeric and other spices added to warmed milk or espresso, were among the year’s trending tonics, with major coffee chains such as Starbucks and Peet’s adding various turmeric-containing options to their menus in 2017.<sup>8</sup>

According to SPINS, the top-selling mainstream turmeric products in 2017 were marketed for non-specific health conditions. However, mainstream consumers increasingly are seeking condition-specific turmeric supplements, particularly those for joint health, immune health, and pain and inflammation. Modern research on turmeric has largely focused on curcuminoids, a group of biologically active compounds that includes curcumin. Evidence from human clinical trials supports some of turmeric’s traditional Ayurvedic uses, including for pain management, gastrointestinal disorders, and skin conditions.<sup>9</sup>

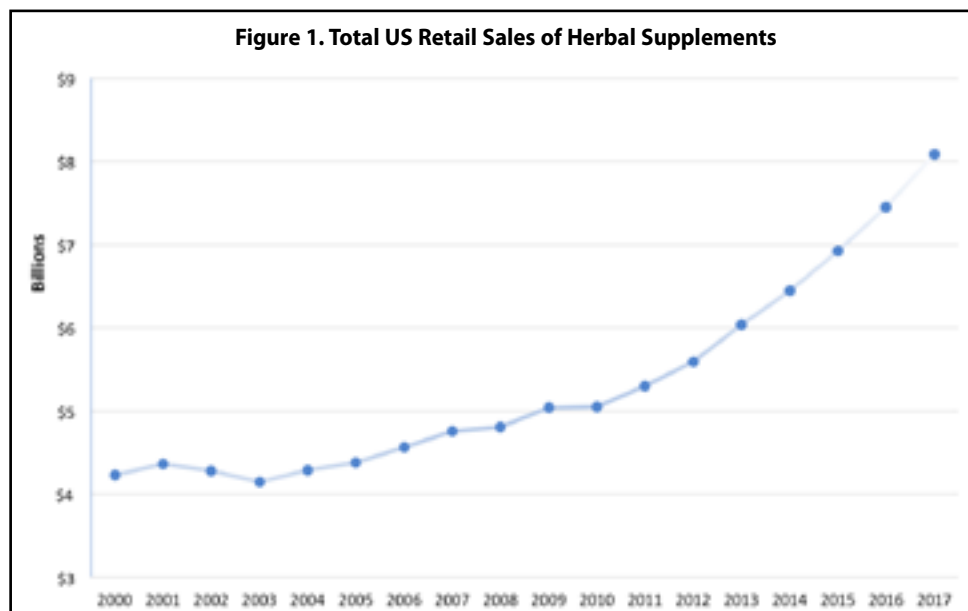
In addition to turmeric, four other botanical ingredients saw sales increases of more than 30% in the 2017 mainstream channel: wheatgrass/barley grass, elderberry, fenugreek, and ivy leaf.

Sales of wheatgrass (*Triticum aestivum*, Poaceae) and barley grass (*Hordeum vulgare*, Poaceae) supplements, which experienced the greatest mainstream sales growth in 2016, grew by 44.2% in 2017. These ingredients likely have continued to benefit from the consumer desire for ingredients with general health and wellness benefits, as discussed later in this report.

Sales of elderberry (*Sambucus nigra*, Adoxaceae) and ivy leaf (*Hedera helix*, Araliaceae), which are typically used to support immune and respiratory health,<sup>10</sup> increased by 34.7% and 30.2%, respectively. Increased sales of these supplements may have been related to the higher-than-average number of flu-like illnesses in the United States from mid-December 2016 to mid-March 2017, as reported by the US Centers for Disease Control and Prevention.<sup>11</sup>

Fenugreek (*Trigonella foenum-graecum*, Fabaceae), an herb traditionally used to stimulate breast milk production, saw an increase in sales of 33.5% from 2016. Multiple human clinical trials published in 2016 and 2017 investigated a range of other

**Figure 1. Total US Retail Sales of Herbal Supplements**



Source: Nutrition Business Journal (consumer sales)

**Table 2. US Retail Channel Definitions\***

	SPINS/IRI	<i>Nutrition Business Journal</i>
Mainstream Channels	<b>Mainstream Multi-Outlet Channel</b> In collaboration with IRI. This channel coverage includes the food, drug, and mass-market sector (or “FDM”; supermarkets, drugstores, and mass market retailers), military commissaries, and select buyer’s clubs and so-called dollar stores. SPINS/IRI data do not include convenience store sales.	<b>Mass Market Channel</b> Mass market includes food/grocery, drug, mass merchandise, and club and convenience stores, including Walmart, Costco, etc.
Natural Channels	<b>Natural Channel</b> Includes co-ops, associations, independent retailers, and large regional chains. These data do not include sales from natural foods retail giant Whole Foods Market, which does not report its dietary supplement sales to SPINS or other market tracking firms. Only full-format stores with at least \$2 million in annual sales (with at least 50% of sales from natural/organic products) are included.	<b>Natural &amp; Health Food Channel</b> Natural and health food include supplement and specialty retail outlets, including Whole Foods Market (estimates), GNC, sports nutrition stores, etc.
Direct Sales		Direct sales include internet, mail order (including catalogs), direct mail, and direct response TV and radio; practitioners representing conventional and alternative products selling to their patients, including ethnic and herbal shops; and multilevel marketing (MLM) and network marketing firms.

\* The sales discussed in this article pertain only to those involving herbal and other plant-based dietary supplements, and generally do not include herbs sold as teas and beverages or as ingredients in natural personal care and cosmetic products, including so-called “cosmeceutical” products.

potential uses for fenugreek, including for age-related symptoms of androgen decline,<sup>12</sup> menopausal symptoms,<sup>13</sup> and low sperm counts.<sup>14</sup> Sales of fenugreek supplements may have also benefited from the increased familiarity with Ayurveda, in which it has been used traditionally for millennia.<sup>15</sup>

Only three herbal supplement ingredients in the 2017 mainstream channel experienced sales decreases of more than 30%: green coffee (–38.2%), coconut oil (–34.9%), and green tea (–30.4%). Once touted for their weight-loss benefits by the popular daytime television host Mehmet Oz, MD, green tea (*Camellia sinensis*, Theaceae) and green coffee (*Coffea arabica*, Rubiaceae) extracts peaked in popularity in 2014, and their sales have declined steadily since then. This is likely due in part to increased consumer skepticism of weight-loss products, whose

marketing claims have been questioned publicly in Senate hearings<sup>16</sup> and consumer education campaigns<sup>17</sup> in recent years. Instead of turning to single-ingredient “miracle” weight-loss supplements, consumers’ attitudes toward weight management products appear to have shifted. “Consumers ... are taking a more balanced, holistic approach to managing weight as an attempt to improve health,” noted Informa Managing Editor Rachel Adams in a recent publication from *Natural Products INSIDER*.<sup>18</sup>

Coconut oil (*Cocos nucifera*, Arecaceae) exploded in popularity in 2013 with a roughly 4,000% increase in sales from 2012, but mainstream sales of this ingredient started to decline in 2016. The continued decline in 2017 may be due in part to a highly publicized Presidential Advisory released in June 2017 from the American Heart

Association. The advisory, which suggested that coconut oil was no healthier than beef fat in terms of potential cardiovascular effects, noted: “Because coconut oil increases LDL cholesterol, a cause of [cardiovascular disease], and has no known offsetting favorable effects, we advise against the use of coconut oil.”<sup>19</sup>

**Table 3. Total Herbal Supplement Sales in US by Channel**

	2014	2015	2016	2017	% Change from 2016
Mass Market	\$1.116 billion	\$1.204 billion	\$1.336 billion	\$1.449 billion	8.4%
Natural & Health Food	\$2.186 billion	\$2.356 billion	\$2.506 billion	\$2.624 billion	4.7%
Direct Sales	\$3.139 billion	\$3.363 billion	\$3.609 billion	\$4.012 billion	11.2%

Source: *Nutrition Business Journal*





**Horehound**  
*Marrubium vulgare*  
Photo ©2018 Steven Foster



**Black cohosh**  
*Actaea racemosa*  
Photo ©2018 Steven Foster

**Echinacea**  
*Echinacea purpurea*  
Photo ©2018 James Sullivan



**Table 4. Top-Selling Herbal Supplements in 2017 — US Mainstream Multi-Outlet Channel**

Rank	Primary Ingredient	Latin Binomial	Total Sales	% Change from 2016
1	Horehound	<i>Marrubium vulgare</i>	\$140,832,190	12.3%
2	Echinacea <sup>a</sup>	<i>Echinacea</i> spp.	\$84,700,409	22.9%
3	Cranberry	<i>Vaccinium macrocarpon</i>	\$68,121,373	-7.9%
4	Ivy Leaf	<i>Hedera helix</i>	\$32,988,778	30.2%
5	Turmeric <sup>b</sup>	<i>Curcuma longa</i>	\$32,456,933	46.7%
6	Black Cohosh	<i>Actaea racemosa</i>	\$32,373,787	-11.3%
7	Garcinia	<i>Garcinia gummi-gutta</i> (syn. <i>G. cambogia</i> )	\$32,298,038	-17.2%
8	Green Tea	<i>Camellia sinensis</i>	\$30,151,628	-30.4%
9	Ginger	<i>Zingiber officinale</i>	\$29,532,707	5.2%
10	Fenugreek	<i>Trigonella foenum-graecum</i>	\$28,823,510	33.5%
11	Flax Seed / Flax Oil	<i>Linum usitatissimum</i>	\$28,361,026	-11.1%
12	Aloe	<i>Aloe vera</i>	\$21,139,780	6.3%
13	Yohimbe	<i>Pausinystalia johimbe</i>	\$19,912,911	-5.0%
14	Saw Palmetto	<i>Serenoa repens</i>	\$19,294,711	10.8%
15	Elderberry	<i>Sambucus nigra</i>	\$19,156,461	34.7%
16	Valerian	<i>Valeriana officinalis</i>	\$17,708,369	-18.2%
17	Milk Thistle	<i>Silybum marianum</i>	\$16,799,553	-0.6%
18	Garlic	<i>Allium sativum</i>	\$15,918,006	-1.0%
19	Boswellia	<i>Boswellia serrata</i>	\$14,638,170	9.7%
20	Senna <sup>c</sup>	<i>Senna alexandrina</i>	\$13,550,590	17.9%
21	Ginkgo	<i>Ginkgo biloba</i>	\$13,150,432	1.7%
22	Cinnamon	<i>Cinnamomum</i> spp.	\$12,140,102	-12.9%
23	Rhodiola	<i>Rhodiola</i> spp.	\$10,912,343	8.1%
24	Coconut Oil	<i>Cocos nucifera</i>	\$9,609,631	-34.9%
25	Ginseng <sup>d</sup>	<i>Panax</i> spp.	\$9,450,098	-2.9%
26	Horny Goat Weed	<i>Epimedium</i> spp.	\$9,440,726	-1.9%
27	Red Yeast Rice <sup>e</sup>	<i>Oryza sativa</i>	\$9,419,567	-4.7%
28	Fennel	<i>Foeniculum vulgare</i>	\$9,374,734	7.3%
29	Guarana	<i>Paullinia cupana</i>	\$9,099,900	-13.8%
30	Plant Sterols <sup>f</sup>	—	\$8,890,234	-27.8%
31	Açaí	<i>Euterpe oleracea</i>	\$8,523,191	-19.6%
32	Green Coffee	<i>Coffea arabica</i>	\$8,358,636	-38.2%
33	Wheatgrass / Barley Grass	<i>Triticum aestivum</i> / <i>Hordeum vulgare</i>	\$8,337,413	44.2%
34	Bioflavonoid Complex <sup>g</sup>	—	\$8,264,590	-17.9%
35	Yerba Maté	<i>Ilex paraguariensis</i>	\$6,630,471	-25.8%
36	Maca	<i>Lepidium meyenii</i>	\$6,250,846	0.0%
37	St. John's Wort	<i>Hypericum perforatum</i>	\$5,805,384	-3.6%
38	Horsetail	<i>Equisetum</i> spp.	\$4,028,325	-2.8%
39	Chia	<i>Salvia hispanica</i>	\$3,857,463	-26.6%
40	Evening Primrose Oil	<i>Oenothera biennis</i>	\$3,587,133	-4.2%

Source: SPINS/IRI (52 weeks ending January 1, 2018)

<sup>a</sup> Includes three *Echinacea* species: *E. angustifolia*, *E. pallida*, and *E. purpurea*.

<sup>b</sup> Includes standardized turmeric extracts with high levels of curcumin.

<sup>c</sup> Excludes over-the-counter laxative drugs containing senna or sennosides.

<sup>d</sup> Excludes eleuthero (*Eleutherococcus senticosus*), formerly referred to as "Siberian ginseng."

<sup>e</sup> Red yeast rice is fermented with the yeast *Monascus purpureus*.

<sup>f</sup> This category does not include  $\beta$ -sitosterol.

<sup>g</sup> Bioflavonoids are phytochemicals that often are extracted from citrus fruits (e.g., *Citrus reticulata*).

**Table 5. Top-Selling Herbal Supplements in 2017 — US Natural Channel**

Rank	Primary Ingredient	Latin Binomial	Total Sales	% Change from 2016
1	Turmeric <sup>a</sup>	<i>Curcuma longa</i>	\$50,346,121	12.2%
2	Wheatgrass / Barley Grass	<i>Triticum aestivum</i> / <i>Hordeum vulgare</i>	\$19,706,608	-6.7%
3	Flax Seed / Flax Oil	<i>Linum usitatissimum</i>	\$15,320,102	-5.5%
4	Aloe	<i>Aloe vera</i>	\$14,474,683	2.6%
5	Elderberry	<i>Sambucus nigra</i>	\$12,452,723	20.6%
6	Ashwagandha	<i>Withania somnifera</i>	\$10,625,382	25.6%
7	Milk Thistle	<i>Silybum marianum</i>	\$9,960,892	3.8%
8	Maca	<i>Lepidium meyenii</i>	\$9,114,769	0.3%
9	Echinacea <sup>b</sup>	<i>Echinacea</i> spp.	\$9,035,520	11.5%
10	Oregano <sup>c</sup>	<i>Origanum vulgare</i>	\$8,693,675	19.7%
11	Saw Palmetto	<i>Serenoa repens</i>	\$7,875,432	11.0%
12	Cannabidiol (CBD)	<i>Cannabis</i> spp.	\$7,583,438	303.0%
13	Cranberry	<i>Vaccinium macrocarpon</i>	\$7,155,636	-1.9%
14	Garlic	<i>Allium sativum</i>	\$6,841,521	16.0%
15	Valerian	<i>Valeriana officinalis</i>	\$5,891,259	3.5%
16	Echinacea-Goldenseal Combo	<i>Echinacea</i> spp. / <i>Hydrastis canadensis</i>	\$5,866,571	15.7%
17	Mushrooms	—	\$5,611,642	29.0%
18	Chlorophyll / Chlorella	— / <i>Chlorella vulgaris</i>	\$5,444,533	-0.2%
19	Coconut Oil	<i>Cocos nucifera</i>	\$5,397,873	-23.5%
20	Garcinia	<i>Garcinia gummi-gutta</i> (syn. <i>G. cambogia</i> )	\$5,371,762	18.3%
21	Horsetail	<i>Equisetum</i> spp.	\$5,370,166	8.1%
22	Ginkgo	<i>Ginkgo biloba</i>	\$4,731,669	6.2%
23	Nigella	<i>Nigella sativa</i>	\$4,675,514	202.5%
24	Fenugreek	<i>Trigonella foenum-graecum</i>	\$3,874,247	2.7%
25	Red Yeast Rice <sup>d</sup>	<i>Oryza sativa</i>	\$3,864,135	2.4%
26	Quercetin <sup>e</sup>	—	\$3,674,159	6.1%
27	Holy Basil	<i>Ocimum tenuiflorum</i>	\$3,633,776	1.4%
28	Cherry Fruit	<i>Prunus</i> spp.	\$3,626,819	8.4%
29	Stevia	<i>Stevia rebaudiana</i>	\$3,470,576	-0.3%
30	Kava	<i>Piper methysticum</i>	\$3,437,360	10.6%
31	Olive Leaf	<i>Olea europaea</i>	\$3,294,700	0.6%
32	Ginseng <sup>f</sup>	<i>Panax</i> spp.	\$3,236,230	5.8%
33	Black Cohosh	<i>Actaea racemosa</i>	\$3,088,416	-8.5%
34	Evening Primrose Oil	<i>Oenothera biennis</i>	\$2,871,622	6.6%
35	Ginger	<i>Zingiber officinale</i>	\$2,823,923	19.8%
36	Kelp	<i>Laminaria digitata</i>	\$2,772,633	1.4%
37	Moringa	<i>Moringa oleifera</i>	\$2,738,118	32.9%
38	Rhodiola	<i>Rhodiola</i> spp.	\$2,686,686	8.7%
39	Hawthorn	<i>Crataegus</i> spp.	\$2,685,685	9.8%
40	Nettle	<i>Urtica dioica</i>	\$2,560,574	12.8%

Source: SPINS (52 weeks ending January 1, 2018)

<sup>a</sup> Includes standardized turmeric extracts with high levels of curcumin.<sup>b</sup> This includes three *Echinacea* species: *E. angustifolia*, *E. pallida*, and *E. purpurea*.<sup>c</sup> Includes products labeled as containing oregano oil and oregano leaf tinctures.<sup>d</sup> Red yeast rice is fermented with the yeast *Monascus purpureus*.<sup>e</sup> Quercetin is a common plant flavonol.<sup>f</sup> Excludes eleuthero (*Eleutherococcus senticosus*), formerly referred to as "Siberian ginseng."



**Table 6. Total US Retail Sales of Herbal Supplements by Product Type**

2014	Total Sales	% of Total Sales	% Growth
Single Herbs	\$4.024 billion	62.5%	6.2%
Combination Herbs	\$2.418 billion	37.5%	7.7%
2015			
Single Herbs	\$4.245 billion	61.3%	5.5%
Combination Herbs	\$2.677 billion	38.7%	10.7%
2016			
Single Herbs	\$4.505 billion	60.5%	6.1%
Combination Herbs	\$2.947 billion	39.5%	10.1%
2017			
Single Herbs	\$4.759 billion	58.9%	5.6%
Combination Herbs	\$3.326 billion	41.1%	12.9%

Source: Nutrition Business Journal

As in previous years, *HerbalGram* chose to exclude certain ingredients from SPINS and IRI's tally of the 40 top-selling herbal supplements in the US mainstream retail channel. As the only branded supplement on the list, Relora (InterHealth Nutraceuticals Inc.; Benicia, California), a proprietary blend of magnolia (*Magnolia officinalis*, Magnoliaceae) and phellodendron (*Phellodendron amurense*, Rutaceae) bark extracts, was not included in this year's report. Had it been included, Relora would have been the 38th top-selling supplement in 2017, despite a 25.6% decline in sales from 2016.

## Natural Channel

According to SPINS, sales of herbal dietary supplements in the US natural channel totaled an estimated \$405,153,959 in 2017, an increase of 8.9% from 2016. NBJ, which, unlike SPINS, includes sales from Whole Foods Market in its natural and health food retail channel, determined significantly higher sales of \$2.624 billion in this channel. In general, natural channel sales come from so-called "core shoppers," who tend to be committed to a natural lifestyle. "Peripheral shoppers," who typically are less committed to natural products and wellness trends, are more likely to purchase dietary supplements in the mainstream channel.

For the fifth consecutive year, turmeric was the top-selling herbal supplement ingredient in natural retail outlets with sales totaling \$50,346,121 in 2017, an increase of 12.2% from 2016. While mainstream consumers primarily purchased turmeric supplements for non-specific health conditions, the greatest sales of turmeric supplements sold in the natural channel were marketed for pain and inflammation. Non-specific health conditions, however, still represented the second largest market share of turmeric supplements sold in this channel, followed by those for joint health and cardiovascular health.

For the first time, cannabidiol (CBD), a naturally occurring, non-intoxicating compound in *Cannabis* species (Cannabaceae), ranked among the 40 top-selling herbal supplement ingredients in the US natural channel. CBD



Ivy  
*Hedera helix*  
Photo ©2018 Steven Foster

was the 12th top-selling ingredient in this channel with total sales of \$7,583,438 in 2017, an increase of 303% from the previous year.

SPINS has been tracking sales of CBD in both mainstream and natural retail channels since 2016, but the legality of this ingredient remains murky. The US Drug Enforcement Administration considers “marihuana” and “marihuana extracts” illegal under Schedule I of the Controlled Substances Act,<sup>20</sup> but certain allowances were made for the research and limited production of industrial hemp when the Farm Bill of 2013 became law in early 2014.<sup>21</sup> In an effort to avoid potential legal issues, many manufacturers have chosen to produce and market products with only “hemp-derived” CBD.

CBD preparations are perhaps best known for their documented benefits for treatment-resistant epilepsy,\* but CBD is “attracting increasing interest as ‘a pharmacological agent of wondrous diversity,’ with analgesic, anti-inflammatory, antioxidant, antiemetic, anxiolytic,” and numerous other documented properties, according to a recent review of CBD claims.<sup>23</sup> The majority of CBD sales in 2017 were attached to products with non-specific health focuses, according to SPINS, but sales of condition-specific CBD formulations, such as those for mood support and pain and inflammation, are beginning to emerge.

*Nigella* (*Nigella sativa*, Ranunculaceae), also known as black cumin or black seed, also experienced significant sales growth in 2017. Retail sales of nigella rose by 202.5% from 2016, making it the 23rd top-selling herb in this channel. According to SPINS, liquid seed oil preparations with non-specific health focuses made up the majority of nigella supplement sales in both natural and mainstream retail stores in 2017.

Archeological evidence suggests that nigella has been used as a food and medicine since the third millennium BCE, and the herb is still commonly used in traditional medicine systems in Asia. In Ayurveda, dried nigella seeds are used to treat various digestive issues (e.g., gas and diar-

rhea), and in the Unani system of medicine, nigella is used to treat a range of conditions, including asthma, migraine, joint and back pain, and skin diseases. Evidence from human clinical trials suggests that nigella preparations may have some benefits for respiratory conditions, rheumatoid arthritis, and functional dyspepsia.<sup>24</sup>

Moringa (*Moringa oleifera*, Moringaceae), which also made its debut among the 40 top-selling herbs in the natural channel in 2017, was the only other ingredient with an increase in sales of more than 30% from 2016. Moringa, like nigella, is a botanical commonly used in Ayurvedic medicine that has general health and nutrition benefits.

**Turmeric**  
*Curcuma longa*  
Photo ©2018 Steven Foster



\* In June 2018, the US Food and Drug Administration approved a CBD oral solution (Epidiolex; GW Pharmaceuticals; Cambridge, United Kingdom) for two forms of rare, treatment-resistant epilepsy that mostly affect children.<sup>22</sup> This is the first time the FDA has approved a drug containing a substance derived from cannabis.



Also known as horseradish tree (not related to the spice horseradish [*Armoracia rusticana*, Brassicaceae]), moringa is cultivated and consumed widely in South Asian countries. The leaves are rich in protein, beta-carotene, vitamin C, calcium, and potassium, and various plant parts have been used traditionally in India to treat inflammation and infection, as well as gastrointestinal, cardiovascular, and liver conditions.<sup>25</sup> According to SPINS, powders made up the majority of moringa supplement sales in the 2017 natural channel.

Consumers suffering from “pill fatigue,” who increasingly are looking for ingredients with general wellness and nutrition benefits in alternative delivery forms (e.g., powders and liquids), likely contributed to the sales growth of nigella and moringa in 2017.<sup>26</sup> In addition, the herbs’ long history of use in Ayurveda may have added to their appeal, particularly for core consumers in this channel who tend to be more familiar with natural product trends. Several other botanicals with traditional Ayurvedic uses experienced sales growth in the natural channel, including ashwagandha (*Withania somnifera*, Solanaceae; 25.6%), ginger (*Zingiber officinale*, Zingiberaceae; 19.8%), and garlic (*Allium sativum*, Amaryllidaceae; 16%).<sup>27</sup>

Coconut oil was the only ingredient in the 2017 natural channel with a significant decline in sales (–23.5%).

## Direct Sales

Direct sales of herbal supplements increased by 11.2% from 2016, reaching an estimated \$4.012 billion in 2017, according to NBJ. This is the strongest percentage sales growth in this channel in more than a decade, and the first time since 2012 that growth in the direct sales channel outpaced that of the mainstream and natural/health food channels. Direct channel sales of herbal dietary supplements include multilevel marketing companies (also known as network marketing companies). This channel also encompasses mail- and internet-order sales companies, direct-response TV and radio sales, and sales by health practitioners.

## Single-Herb vs. Combination-Herb Supplements

For the seventh consecutive year, sales growth of combination-herb supplements was stronger than that of single-herb supplements. Across all channels, sales of combination-herb supplements increased by 12.9% from 2016, and sales of single-herb supplements increased by 5.6%. Combination-herb formulas generally are intended for more specific uses than single-herb supplements. Despite the continued growth for combination-herb products, single-herb supplements have composed the majority of overall sales for more than a decade.

## Conclusion

After the highly publicized and controversial campaign against certain herbal supplements led by the New York attorney general in 2015, the natural products indus-

try entered a period of self-reflection. Since then, many responsible members of the dietary supplements industry have taken significant steps to regain consumer trust by improving transparency along the supply chain, enhancing traceability of raw botanical materials, and bringing attention to ingredients with potential adulteration concerns, among other efforts. The record 8.5% growth in herbal supplement sales in 2017 suggests that these efforts may be paying off. Sales in both natural retail outlets and mainstream stores reflect heightened consumer interest in once-obscure botanicals and medical traditions. Increased familiarity with Ayurvedic herbs, new formulation options, and consumer demand for culinary botanicals with general health and nutrition benefits continued to drive sales of these products in 2017. HG

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**Cranberry**  
*Vaccinium macrocarpon*  
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