Naturally Informed: Active Aging: Mastering the Market

Mobility: The Bone & Joint Health Category Gene Bruno, MS, MHS, RH(AHG)

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Aging of America



- America is getting older¹
 The middle-aged currently outnumber children
 - In 2034, people over 65 years will outnumber children
- Two top health concerns of aging adults²:
 - 1. "Continue with normal activities as I age"
- 2. "Retaining mental sharpness as I age"
- Focus on mobility: bone & joint health supplement category
 - Osteoporosis and osteoarthritis
- https://www.census.epu/
 HealthFocus, 2012 HealthFocus 2012 U.S. consumer survey. HealthFocus, St. Petersburg, Fl._way







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Statistics for Osteoporosis & Osteoarthritis

- 43.1% or adults 50+
 Projected increased fractures due to OP
 (2018-2040)²
 1.9 to 3.2 million (68%)
- Sarafraci N, et al. Obscoporosis or low bone mass in older adults: United States, 2017–2018. NCHS Data Brief, no 405. Hyattsville, ND: National Center for Health Statistics. 2021.
 Lewecke DH, et al. (MarWin. 2019 May 133(9):e10192.
 Sarbous ES, et al. (MAMR Mosh Narral Wkly Rep. 2017;65(9):246-253.
 United States Shore and Joint Initiative. The Burden of Macculosieletal Diseases in the United States (BMUS). In: In. Fourth ed. Roserrors, I. 2018.







Osteoarthritis
 1 in 4 (54.4 million) adults have some form of arthritis
 Projected to reach 78 million by 2040
 Osteoarthritis (OA) most common
 Affecting 32.5 million adults'

Bone & Joint Health Supplement Category Bone & Joint Health Supplements Global market estimated at \$11.7 billion in 2022 Projected to reach \$17.6 billion by 2027 CAGR of 8.5% during forecast period¹ Boomers biggest users Gen Z interest in joint health products due to sedentary lifestyle-related joint discomfort² Boomers are 114 minutes more active weekly compared to Gen Z³

2022 2027

Research and Markets. Bone & Joint Supplement Market to Reach \$17.6 Billion by 2027. Jul 05, 2022. Retrieved July 5, 2022 from <a href="https://lineaconsequence.com/consequence/cons

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Bone Health Nutraceuticals



- Calcium and vitamin D reign supreme
- Other relevant nutraceuticals

 - UTION TELEVANT UNITFACEUTICALS

 Vitamin KZ (as menquinone-7)

 Osteocalcin and matrix Gia (KZ dependent proteins) need for bone mineralization

 3-year study using 180 mcg/day (244 postmenopausal women): significantly decreased the age-related decline in bone mineral content and bone mineral density

 Milk Basic Protein

 Subject of several studies with different age groups of women given 40 mg/day

 Younger women: Increase bone mineral density/improved bone metabolism in 6 months:

 Menopausal women: Prevented bone loss.

 Older women (65+ years): Helped maintain bone mineral density⁴
- Knapen MH, et al. Osteoporos Int. 2013 Sep;24(9):2499-507.
 Uenishi K, et al. Osteoporos Int. 2007 Mar;18(3):385-90.
 Aoe, et al. Osteoporos Int. 2005 Dec;16(12):2123-8
 Aoyagi Y, et al. Int Dairy J. 2010;20(10): 724-730.







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Joint Health Nutraceuticals



- Glucosamine and chondroitin prevalent, but popularity declining
 People want less pills (not 4+)
- Cucumber fruit water extract (Q-Actin^m)¹
 G-month, R, DB, parallel-group study in 122 QA patients (aged: 40-75) compared 20 mg/day cucumber to 2700 mg/day glucosamine/chondroitin
 Joint pain decreased "70% w/cucumber, compared to "34% with glucosamine-chondroitin
 R, DB, PC study w/3 groups (20 mg, 100 mg, placebo)
 Pain score reduction: 20 mg-32%, 100 mg, 39%, placebo-5%
 Terminalia Chebula (AyuFlex®)

 84 day DB, PC field in 315 hoalthy, cucumoist man function w/corprise related known and
- - 84-day, R, DB, PC trial in 105 healthy, overweight men/women w/exercise-related knee pain, 500 or 1000 mg/day

 8bth doses improved knee joint pain associated with activity/exercise
- Nash RJ, et al. Clin Interv Aging. 2018 Oct 25;13:2119-2126.
 Nash RJ, et al. Unpublished. 15 pgs.
 Lopez HL, et al. BMC Complement Altern Med. 2017 Oct 2;17(1):475.

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Many other evidence-based nutraceuticals • Bone health • Joint health Calcium Vitamin D • Glucosamine/chondroitin • Turmeric extract • Magnesium · Boswellia extract • Manganese, Copper, Zinc Ginger extract • Silicon • Eggshell membrane • DHEA • SAMe Collagen peptides • Ipriflavone • Boron • MSM • And more • And more

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Practical advise

- · Avoid "fairy dusted" products
- Focus on products using clinically relevant dosing of nutraceuticals with demonstrated efficacy
- Survey data indicate¹:
- \bullet 59% of global consumers want to see scientific evidence supporting supplement efficacy
- Clinically demonstrated benefits are important to 73% of global dietary supplement users.
- Better ethics, more satisfied customers = better business
- DuBow V. Forward-looking consumer insights drive what's next for dietary supplements. Natural Products Insider. Jun 23, 2022

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Other treatment

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