



OFFICE OF
DIETARY
SUPPLEMENTS

Why Do Americans Use Dietary Supplements?

Motivations for Dietary Supplement Use

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National Institutes of Health



Agenda

- **USE**

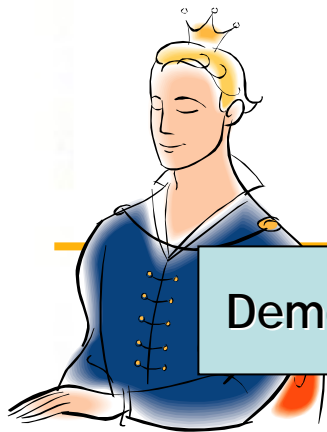
- How do people vary in dietary supplement use?

- **MOTIVATIONS**

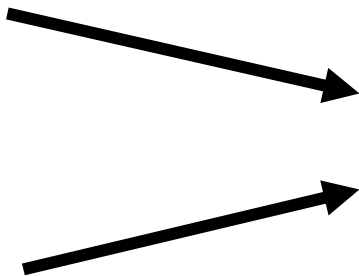
- Do people think they are “deficient”?
- Do motivations for use vary by
 - **person** (demographics, health status, readiness)
 - **supplement** (nutrient vs herbal/botanical)
- Are some people more ready to use than others?

- **IMPLICATIONS** for dietitians





Demographics



Motivation



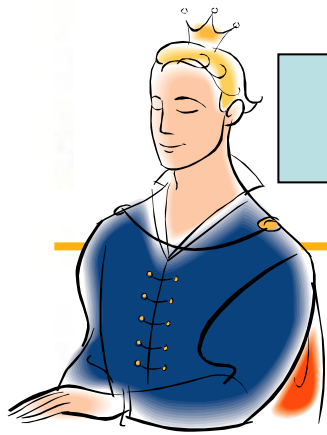
Use



Attitudes

N=2002 nationally representative grocery shoppers, in 2003





Demographics

Age
Sex
Income
Education
Ethnicity

Motivations

Use



Attitudes

Concerns about
Nutrient deficiencies

Health status

Readiness to engage
In preventive behaviors

Nutrient vs Non-nutrient
Specific products



Population

- Representative sample
 - Primary grocery shoppers/heads of household in USA, 2003
 - N=2002
 - Surveyed by National Family Opinion for The Natural Marketing Institute (NMI)
 - 16 page mail-home questionnaire of Health and Wellness
 - Secondary data analysis funded by ODS, NIH
- Results nationally projectable within 2%



Methods

- **Motivations and use**
 - **General**
 - **For specific conditions/purposes**
 - weight loss
 - managing chronic conditions
 - others
- **Respondents**
 - **Demographics**
 - Age
 - Sex
 - Income
 - Education
 - Ethnicity
 - **Current health status**
 - **Type of supplement used**
 - nutrient vs nonnutrient
 - **Readiness to use DS**



Methods

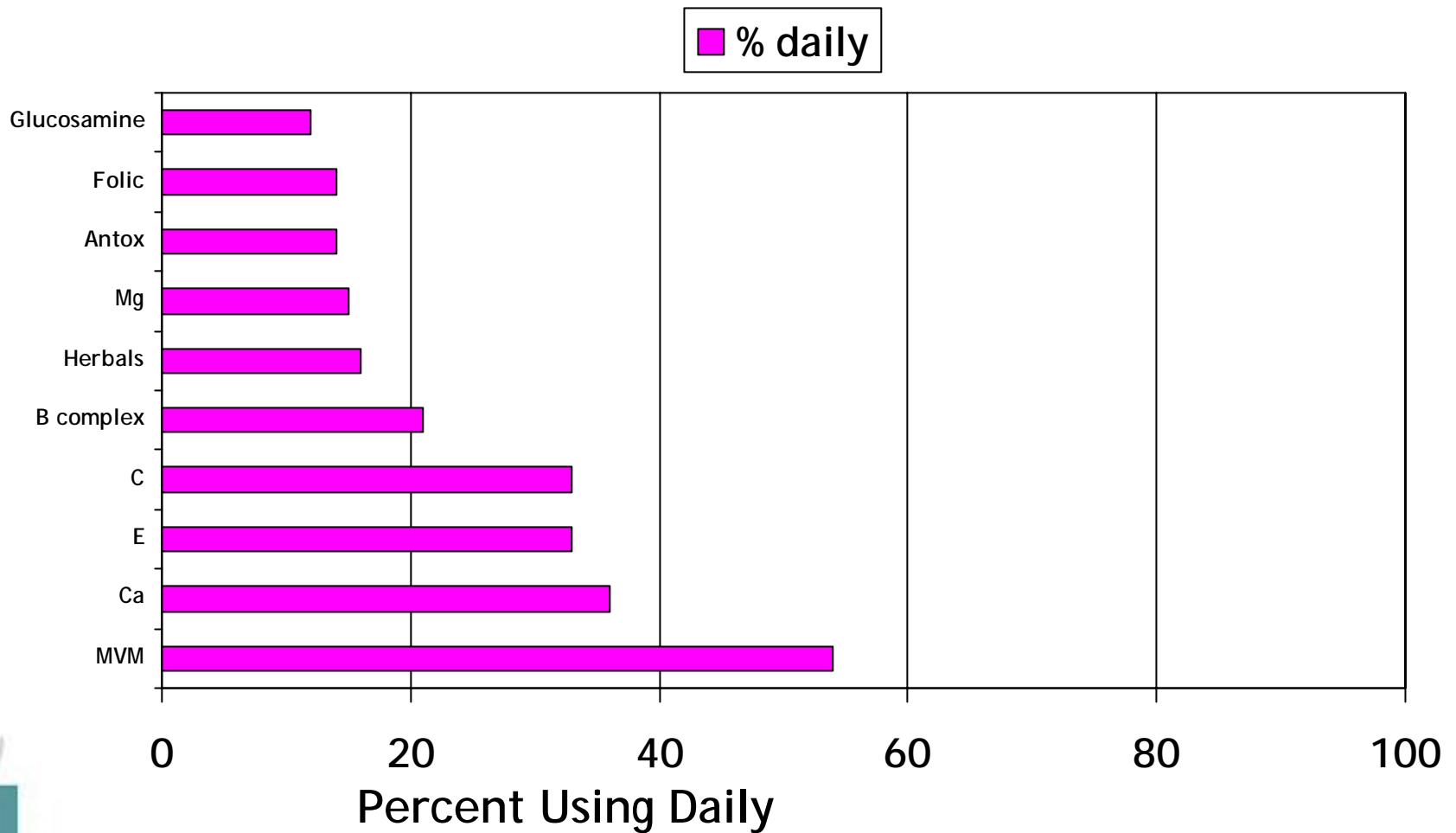
- Respondent characteristics
 - Demographics
 - Age
 - Sex
 - Income
 - Education
 - Ethnicity
 - Current health status
 - DS use
 - Motivations
- Supplement characteristics
 - Type (nutrient vs herbal and other)
 - Category (MVM, single nutrient, condition-specific)



How do people vary in DS use?

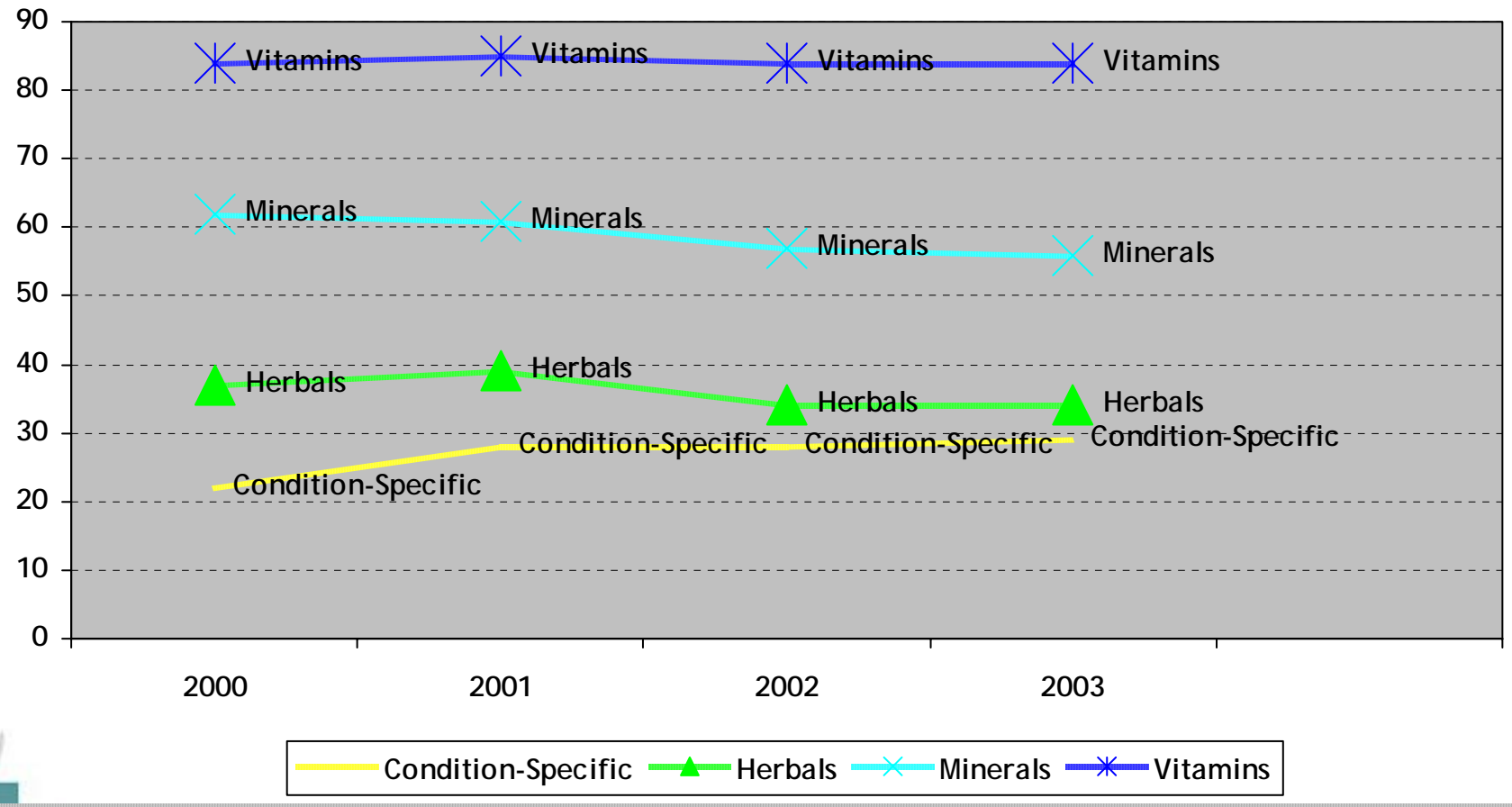


Most Popular Nutrient DS 2003



Lately herbal DS decreasing and condition-specific DS increasing!

Percent Used
Last Year



Use past 12 months

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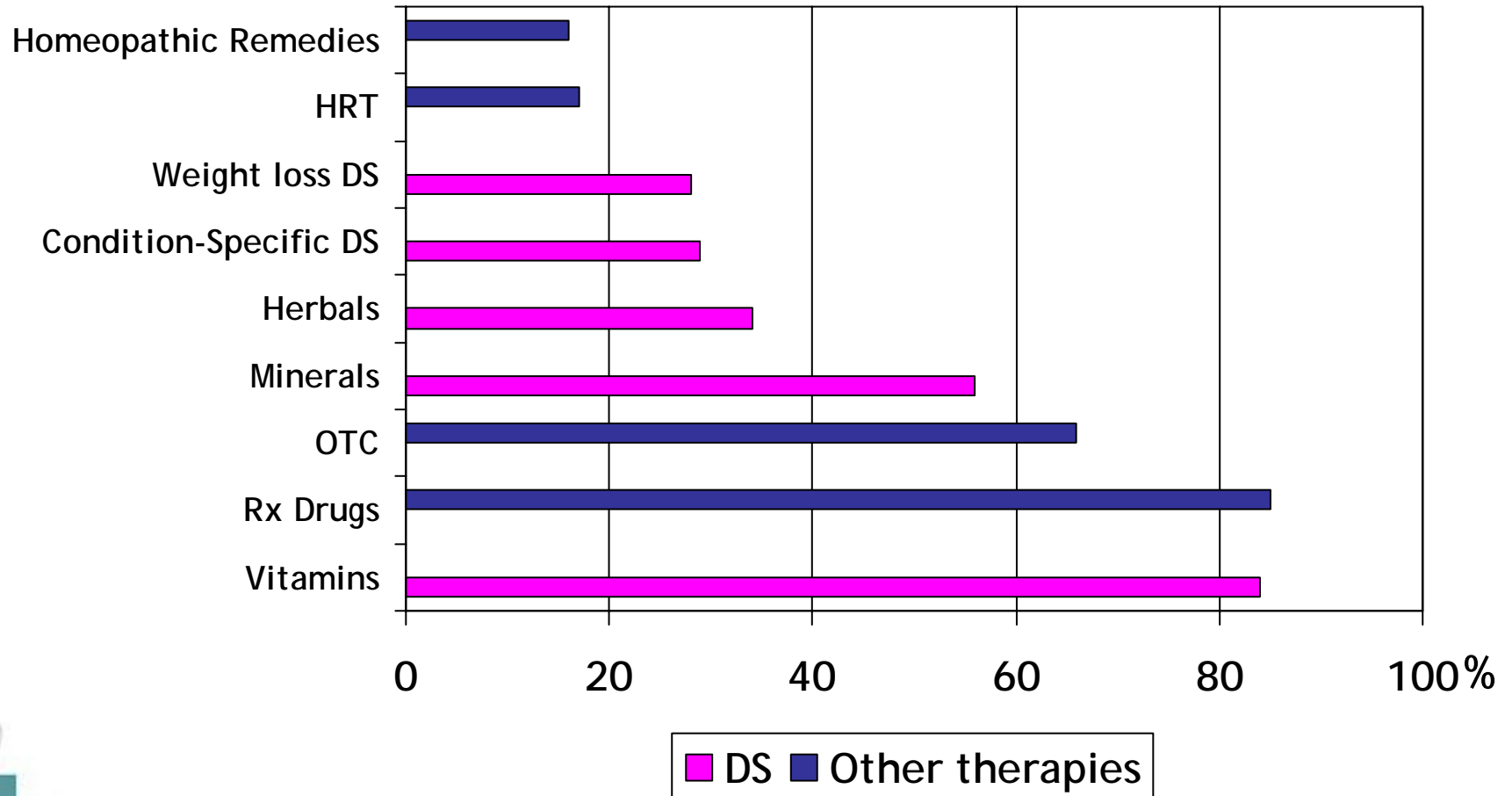


Factors affecting use

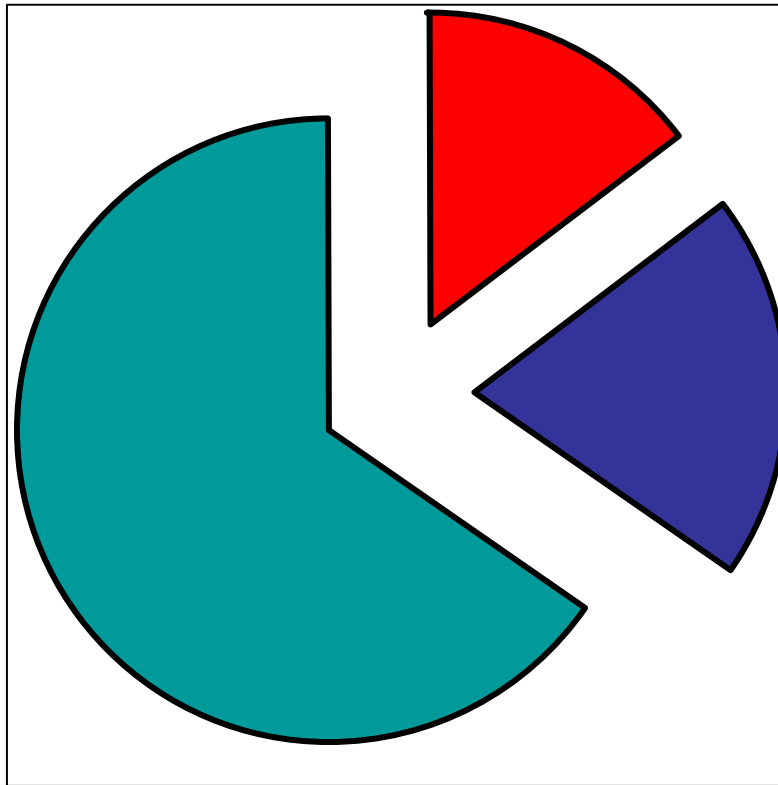
- **Demographics**
 - More with age especially if feeling poorly
 - F>M
 - W> B or Hispanic
- **More with poor current health status**
- **Supplement type and category also affect**



Use of some DS very common past year



People use DS in various ways



- Use DS & alternative healthcare first
- Use combo DS, RX & OTC drugs simultaneously
- Use Rx drugs first



Implications for Dietitians

- With patients undergoing medical treatment
 - If prescription drugs are prescribed, encourage their use as directed *first*
- Ask about DS use since it is common among the ill
 - Counsel to avoid possible adverse interactions

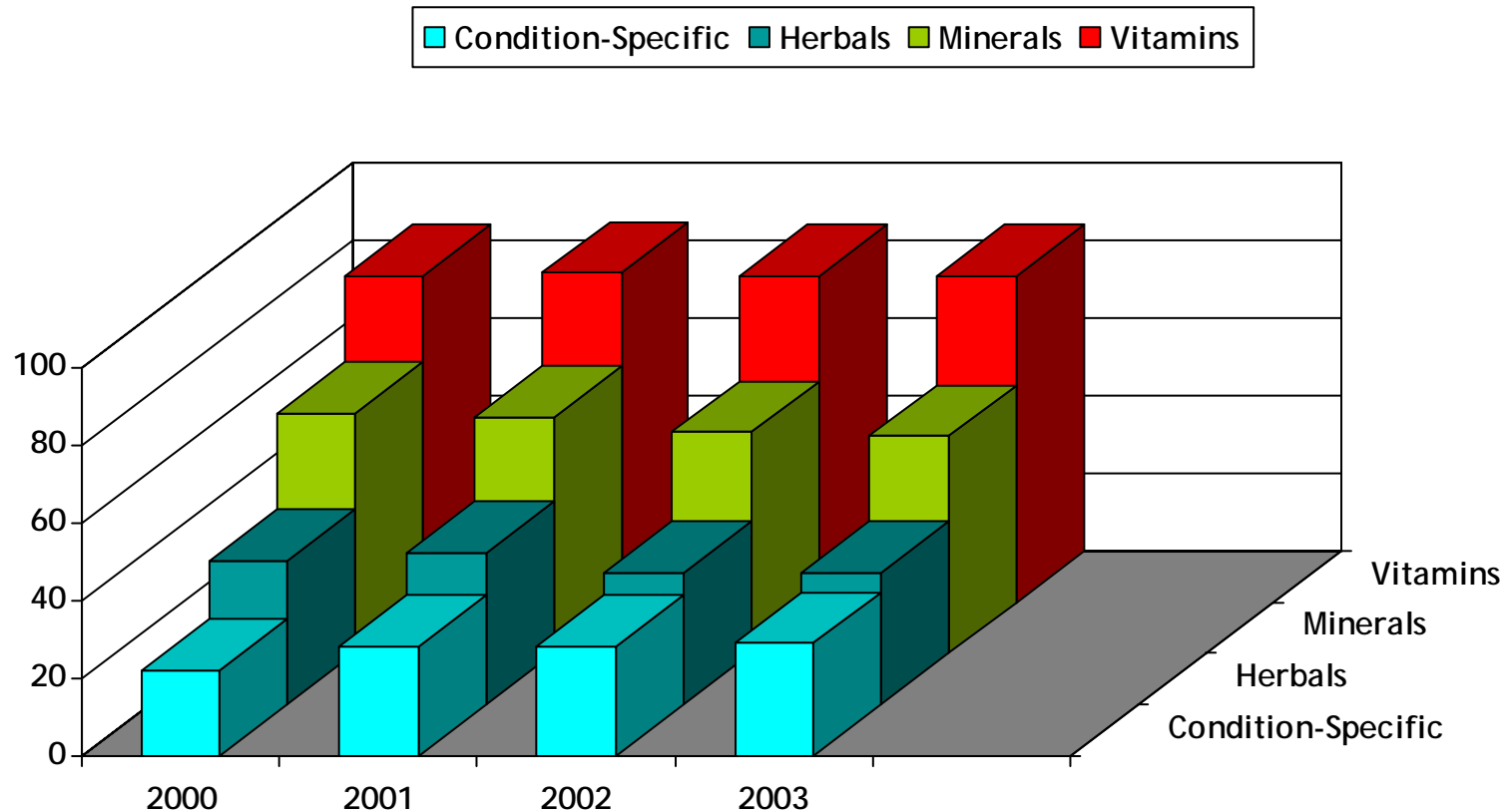


Implications for Dietitians

- People at special risk
 - Use DS first for *treatment*
 - Use DS, conventional medical therapies and CAM all at the same time for disease *treatment*
- Need to note to avoid interactions and failure to apply better tested treatments



Herbals going down over time; condition-specific DS up!



Use past 12 months

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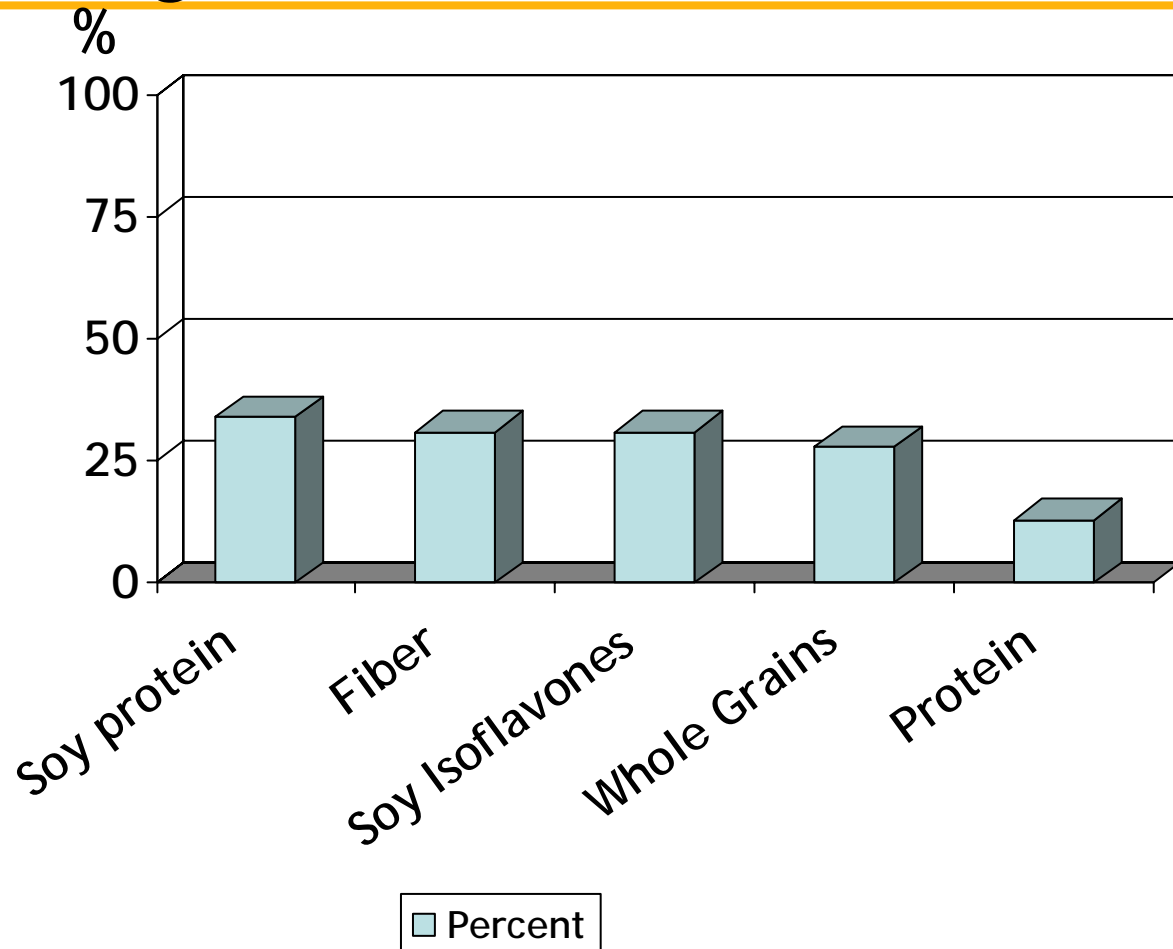
Motivations



Do people think they are “deficient”?



Concerned about “deficiencies” in foods, ingredients, and nutrients



Which do you consider deficient in your current diet?

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What are consumer perceptions of nutrient/food deficiencies ?



Implications

- Consumers mix up poor food choices and true nutrient deficiencies
- Some think that eating less of a food than recommendations is “deficiency”

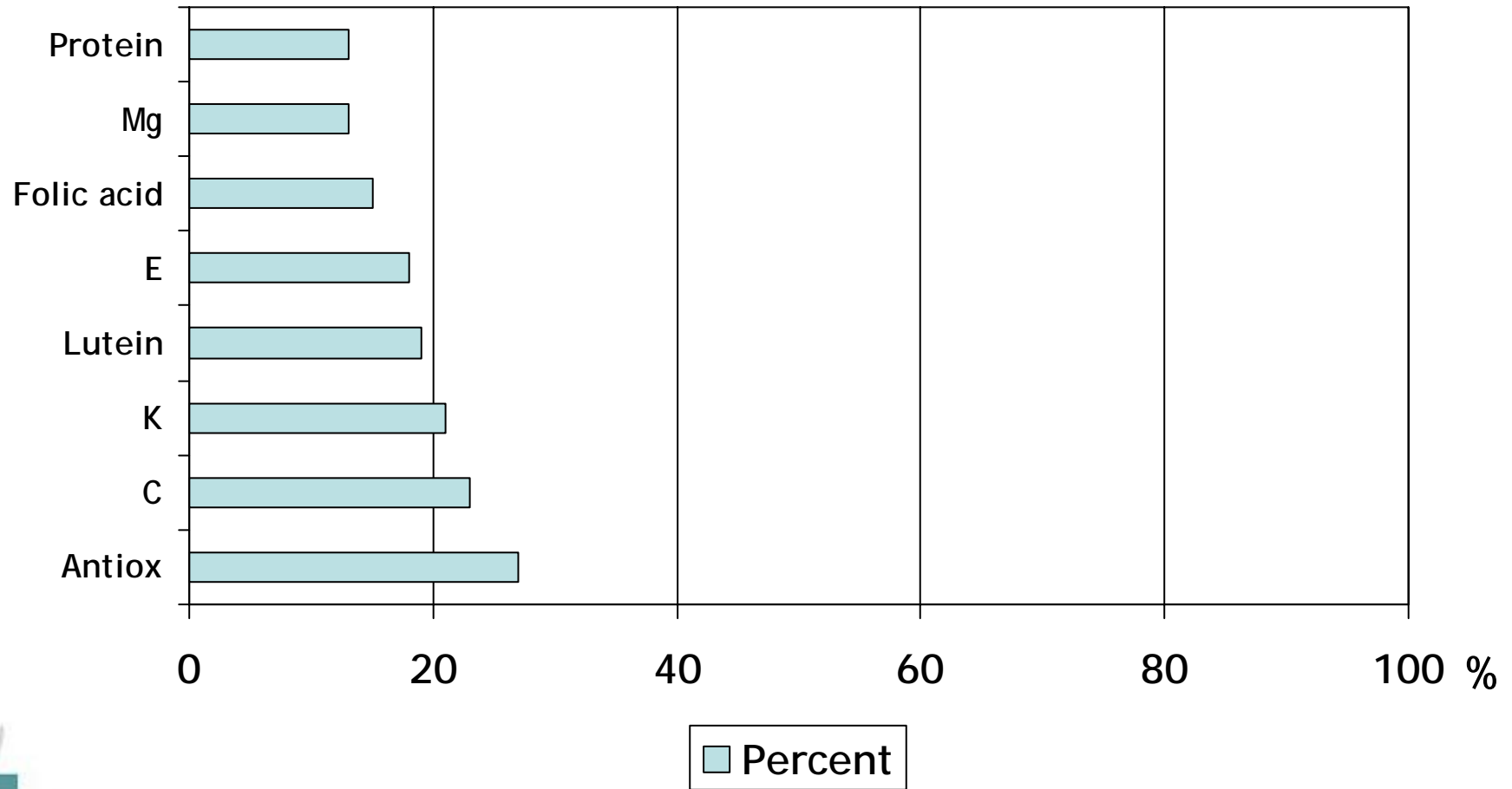


Implications

- Consumer and medical views of deficiency differ
 - Consumers interpret phrase as :
 - “not getting enough in diet”



Concerned about “deficiencies”



Which do you consider deficient in your current diet?

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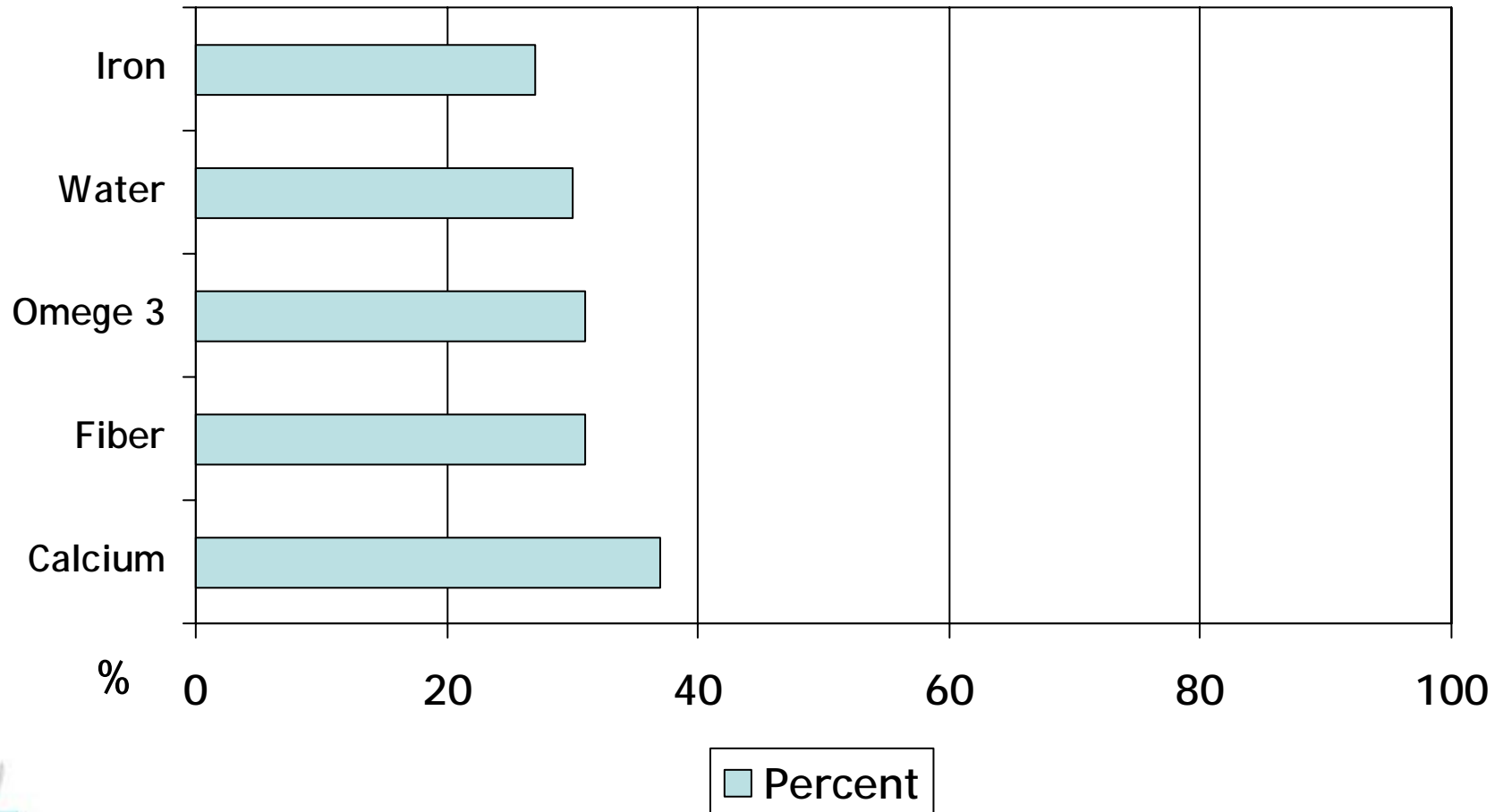


Validity of dietary deficiency concerns varies

- **Some evidence for low intakes in subgroups in for**
 - Some nutrients: folic acid ,calcium , soy, fiber, potassium
 - Some foods: Whole grains
- ***But little evidence for others***
 - Soy protein and isoflavones
 - Water
 - Omega 3's?



Concerned about "deficiencies"



Which do you consider deficient in your current diet?

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Implications

- Sizable minority think they have nutrient deficiencies



-
- Those reporting feeling poorly reported *more* perceived nutrient deficiencies
 - However, perceived deficiencies of nutrients & foods **not** associated with use of DS



Implications

- People who report a “deficiency” more likely to also report health problems



Why do people use supplements?

- Depends on person's characteristics
- Also on type of supplement



Personal characteristics

- Sex
 - *Big* differences by sex on type of DS used
- Poor reported health status
 - More use of herbal, condition-specific DS
 - Less of vitamin minerals



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- *Poor Reported Health Status*
 - Those in poor physical, emotional or mental health used DS for specific health conditions more
 - *Implication*
 - *Be sure to check DS use in ill*



- *Demographics*

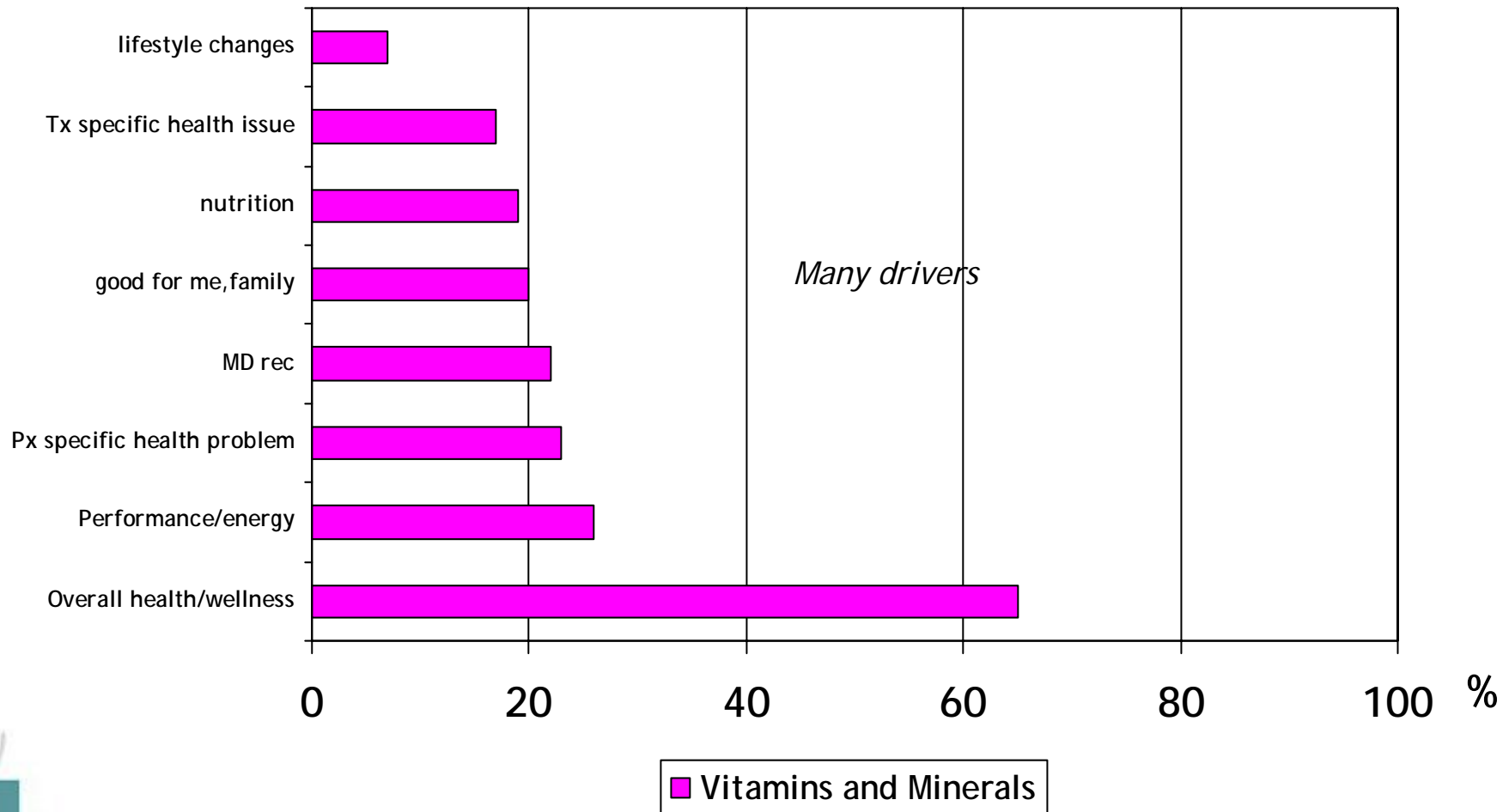
- Women more mentions of
 - “MD recommended”
 - “Good for me and family”

- *Implication:*

- *Women often traffic cops for DS use in families; enlist their help when DS needed*

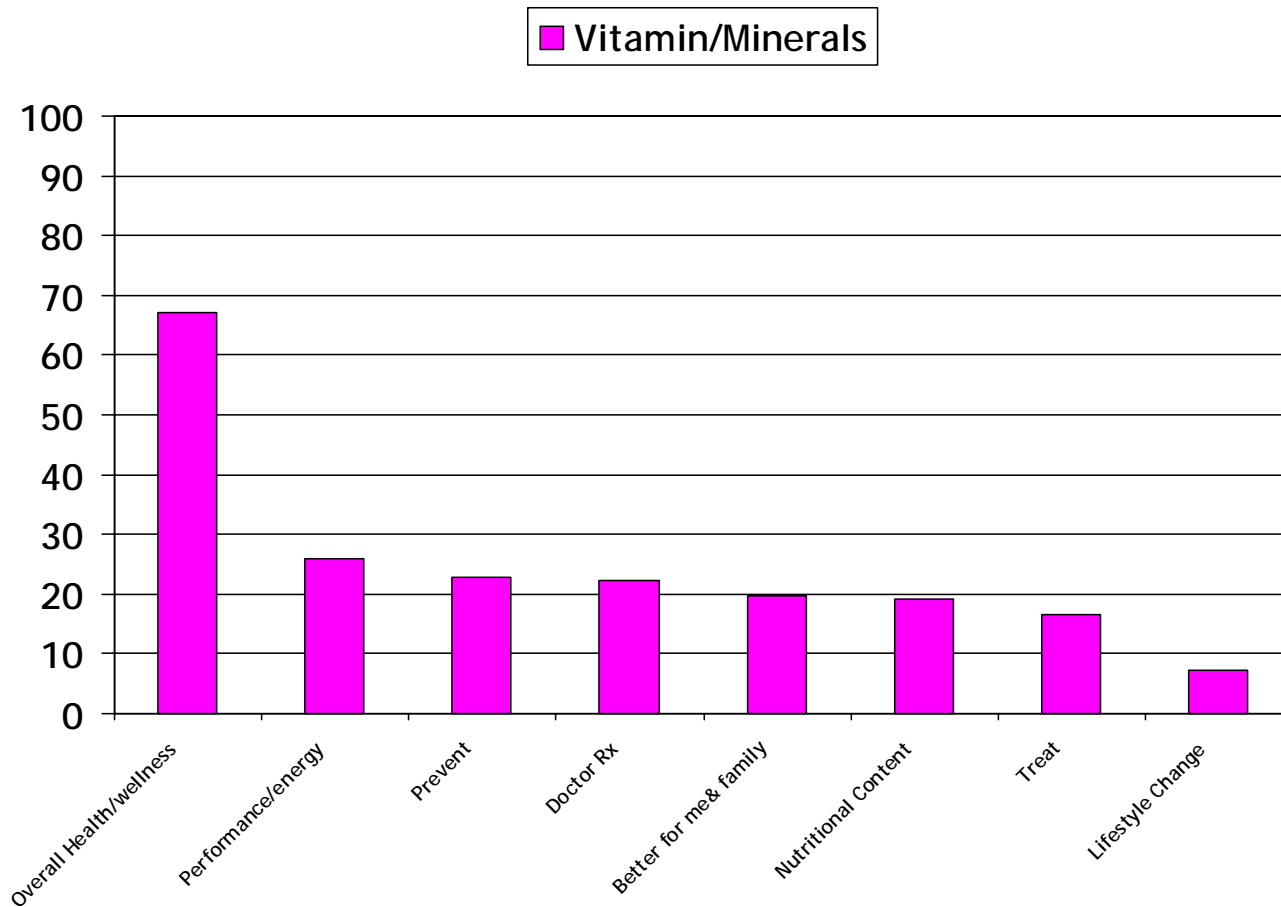


Why Vitamin Mineral DS important to me

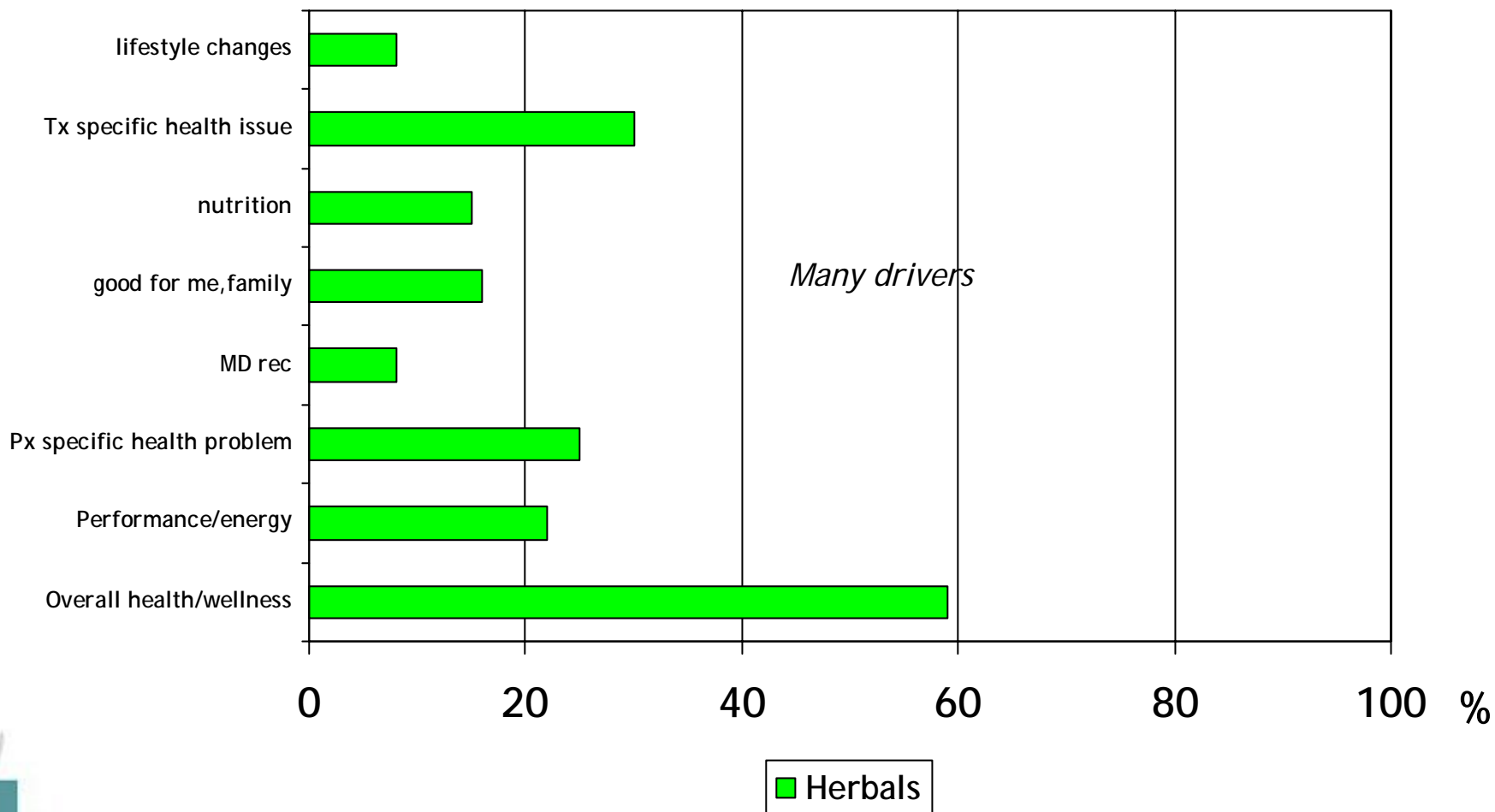


Reasons for first using vitamin mineral DS

Percent

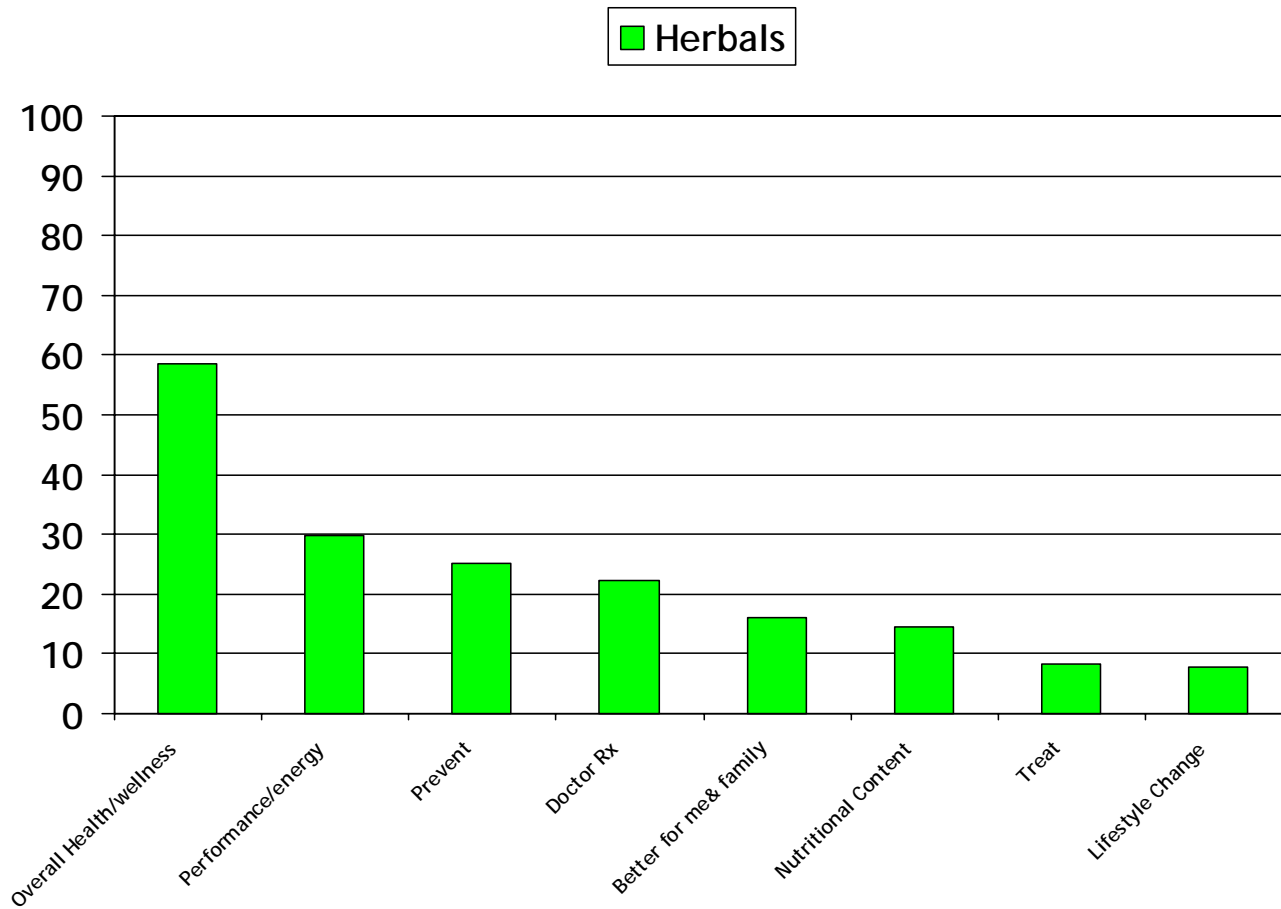


Why Herbal DS are important to me

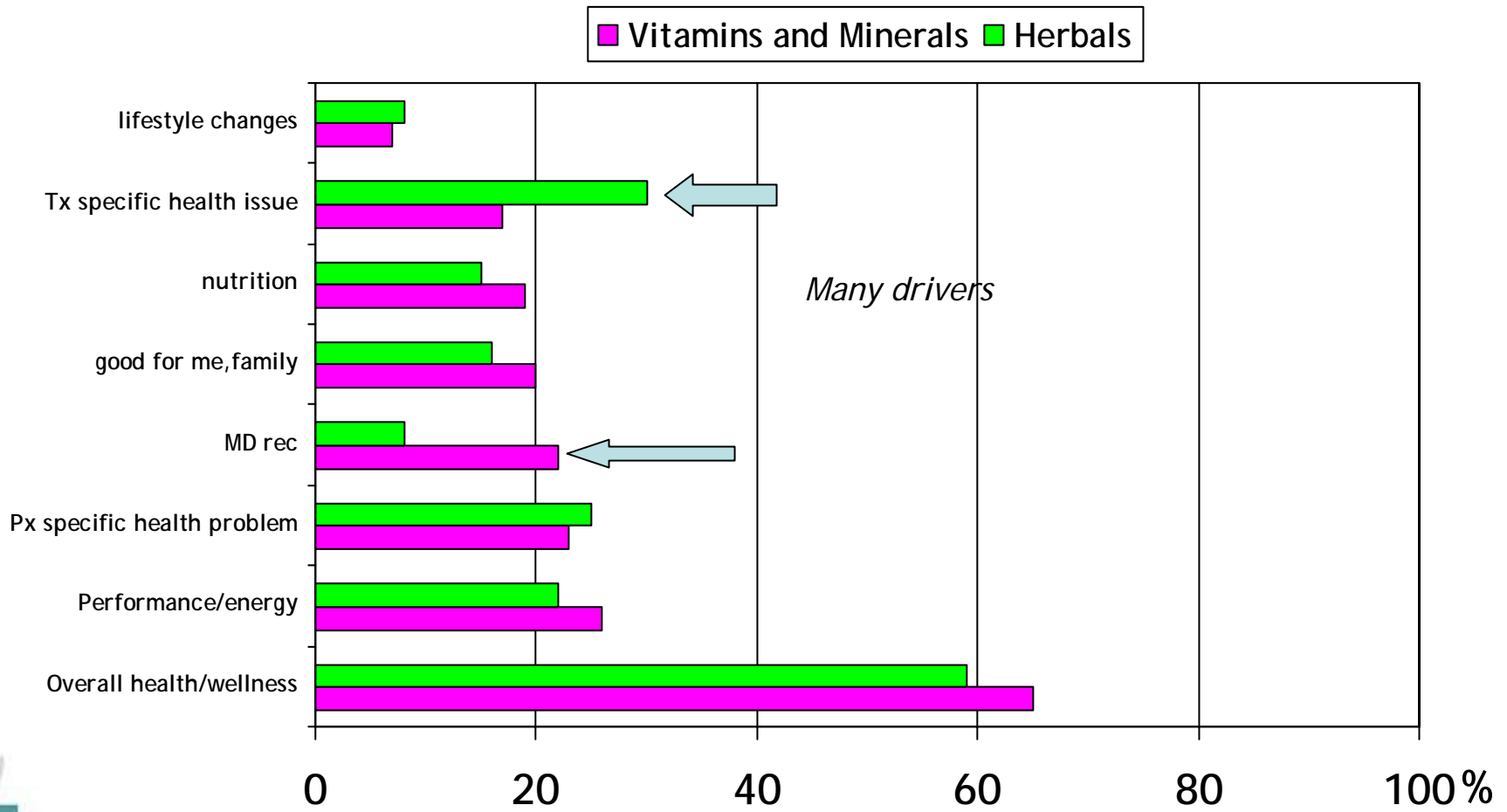


Reasons for first using DS

Percent

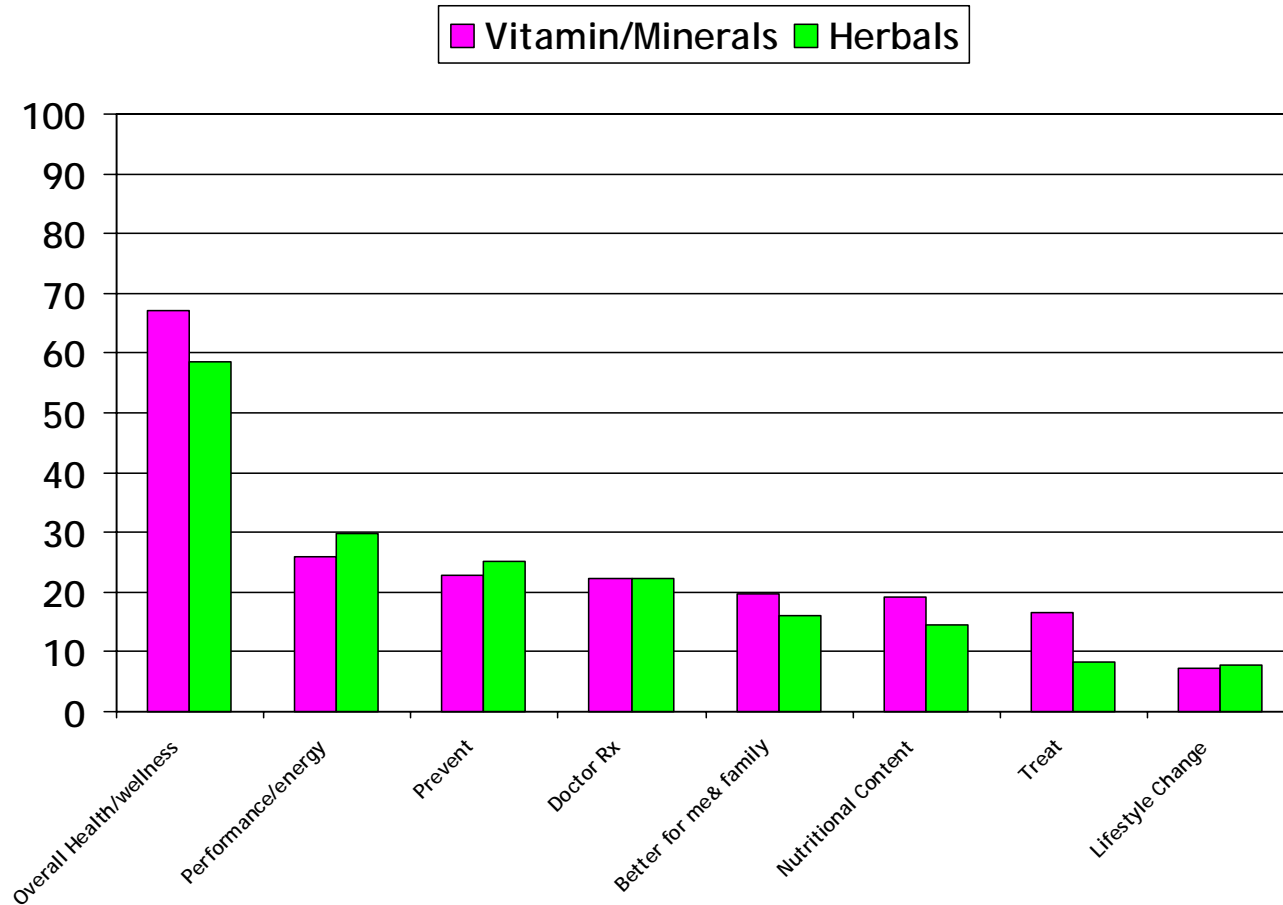


Why DS are important to me



Reasons for first using DS

Percent



Implications

- Many drivers for use
- Differ only slightly by supplement type



Why do people use dietary supplements???



Authoritative Guidance

- **The Law:**

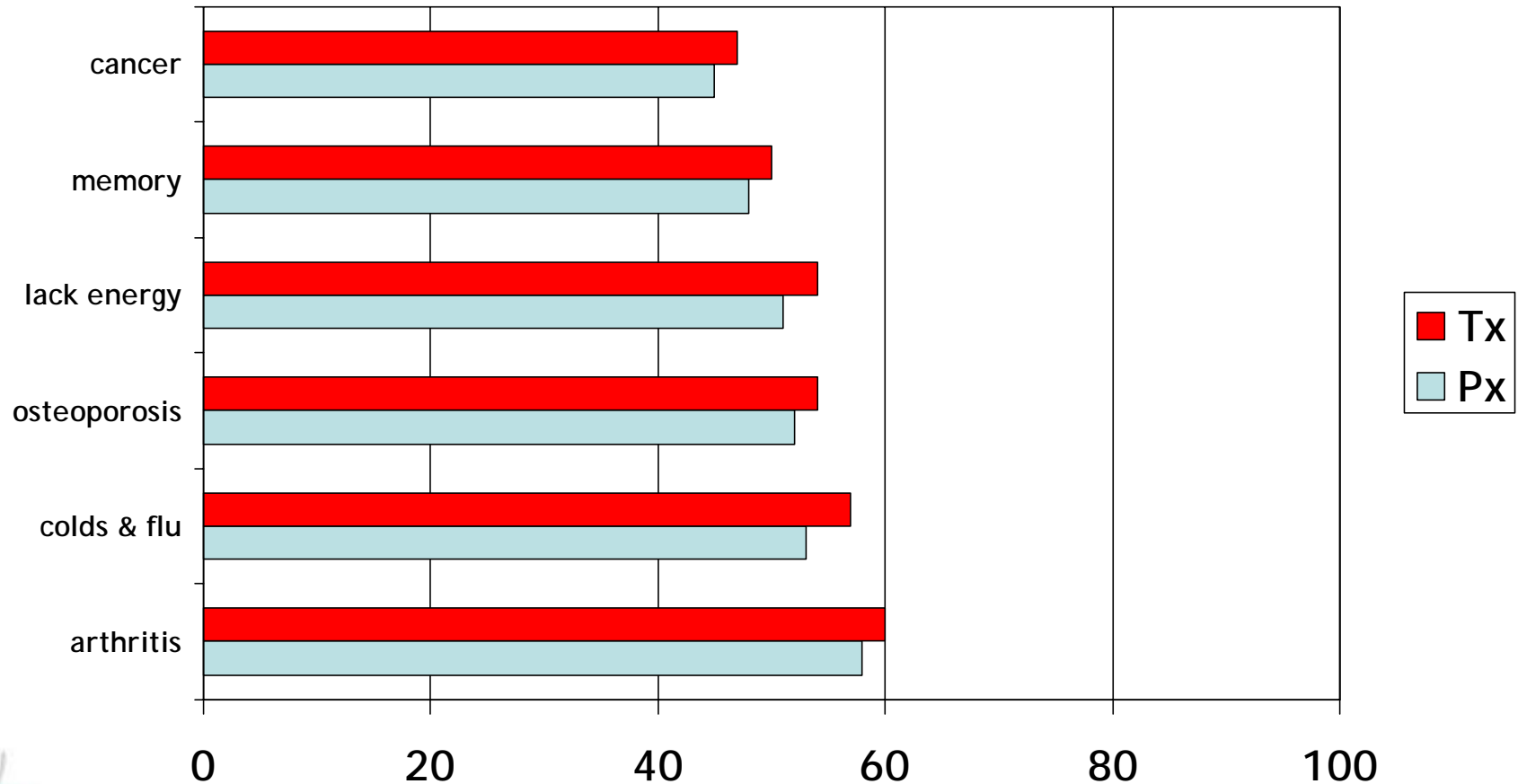
- DSHEA 1995:
- *DS are not for prevention or treatment of disease*

- **Experts**

- DS inappropriate as substitutes for evidence-based therapies prescribed by physicians



Consumer view DS as helpful in Px and Tx of many conditions

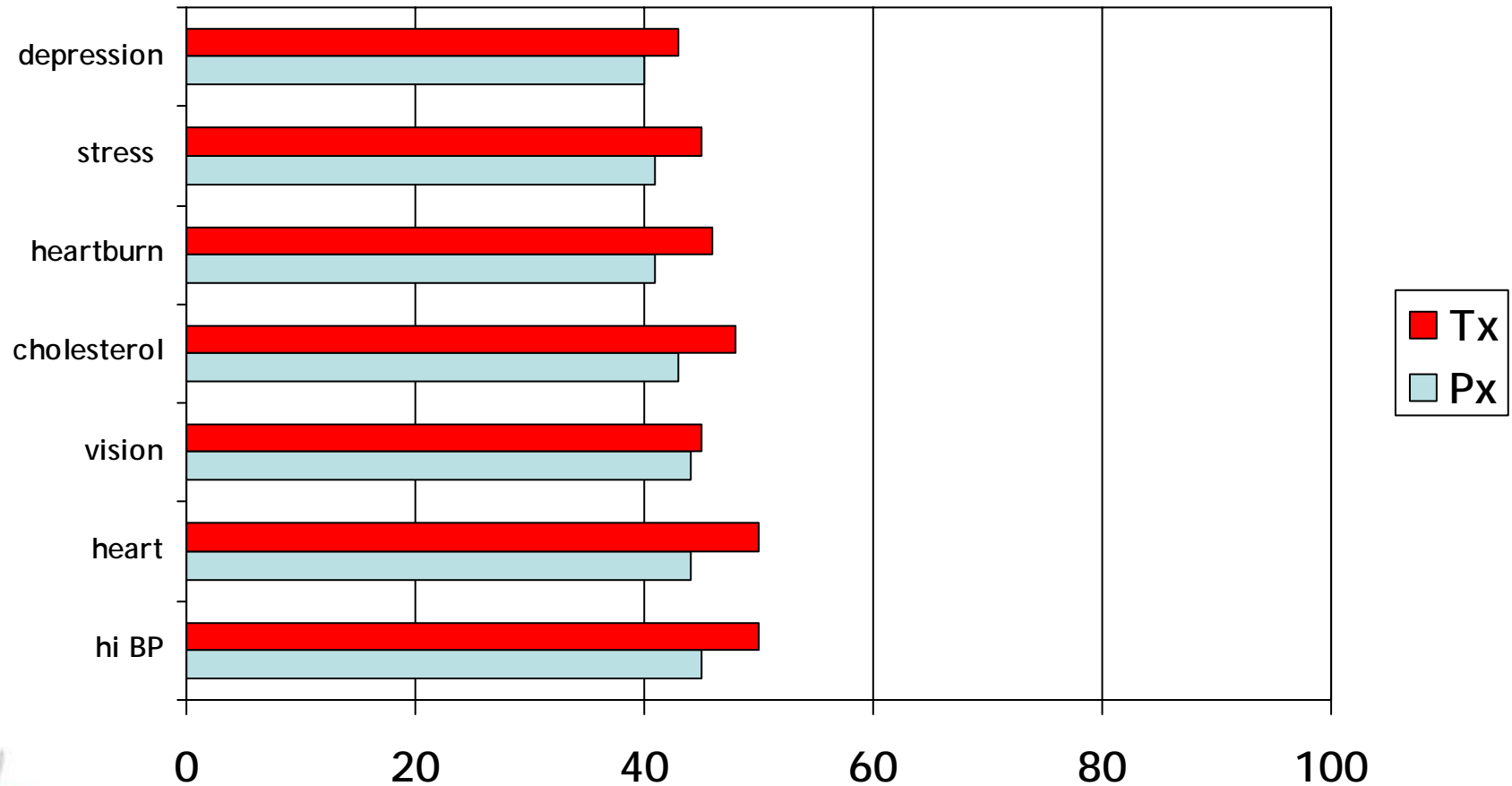


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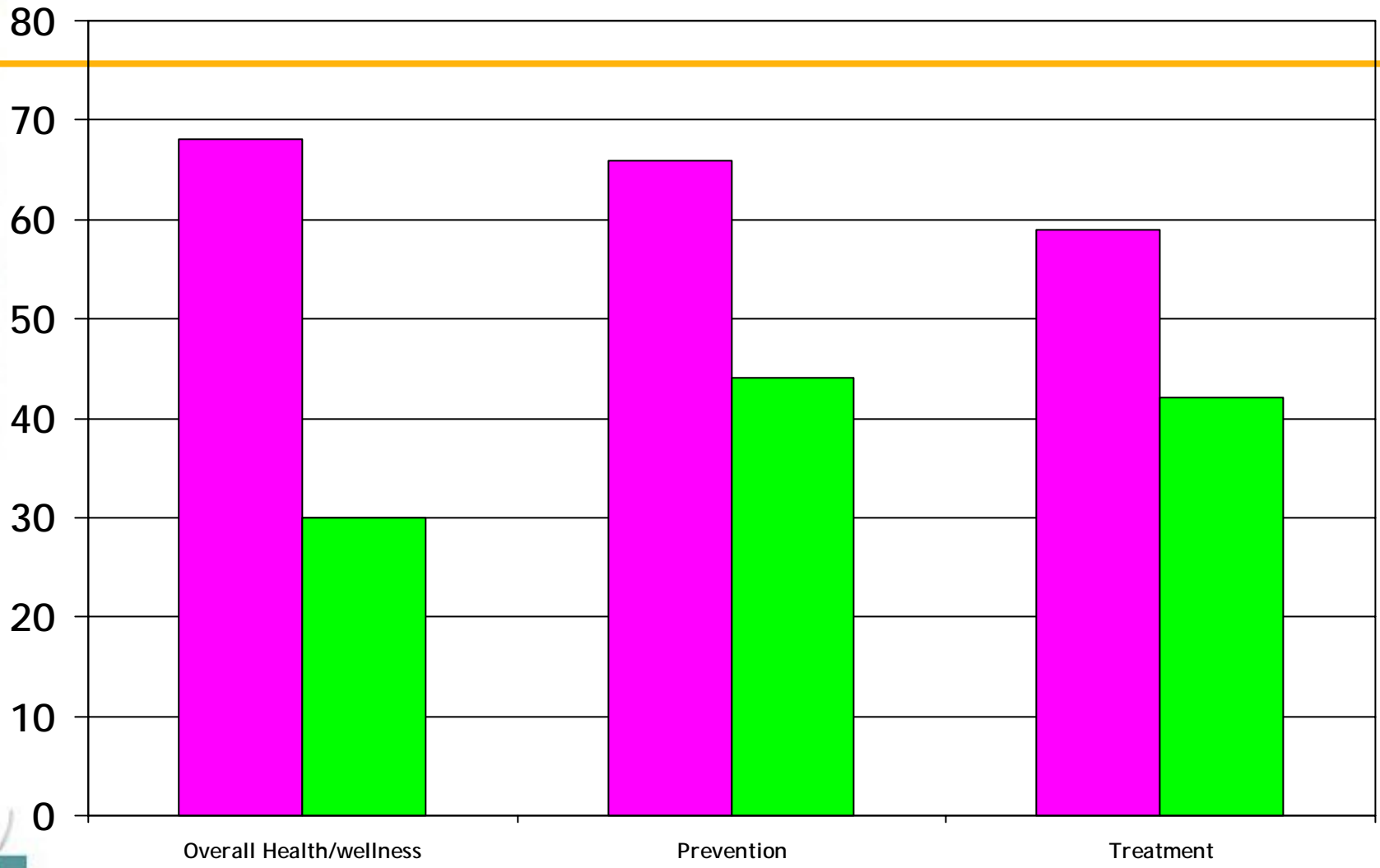


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Consumers view DS as helpful in Px and Tx of many conditions



Vitamin/Minerals Herbals

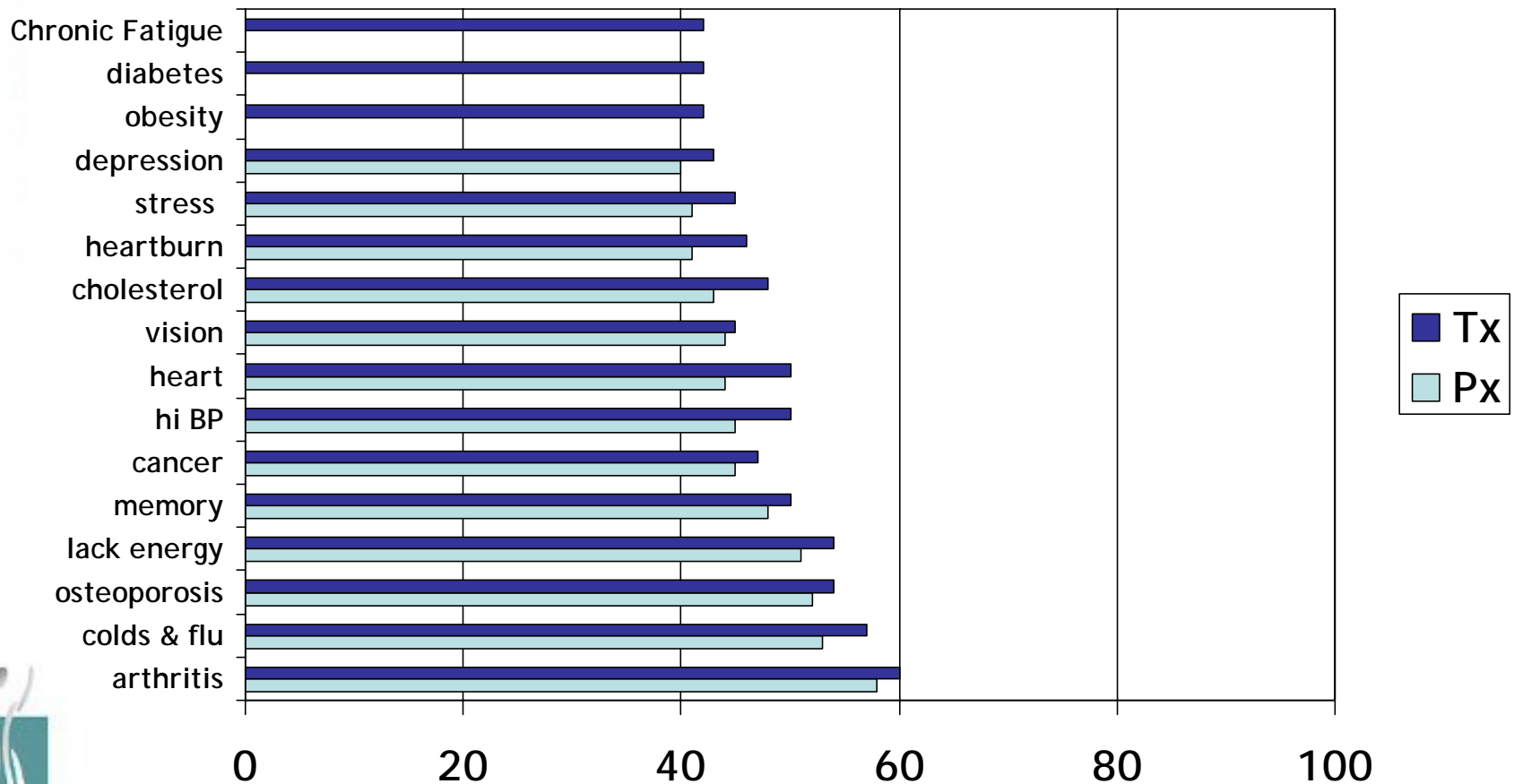


Agree that taking... is effective in(agree completely/somewhat)

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Consumers view DS as helpful in Px and Tx of many conditions



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Implications

- DS often used in ways differently than the law intends
- Caution needed, especially if for treatment



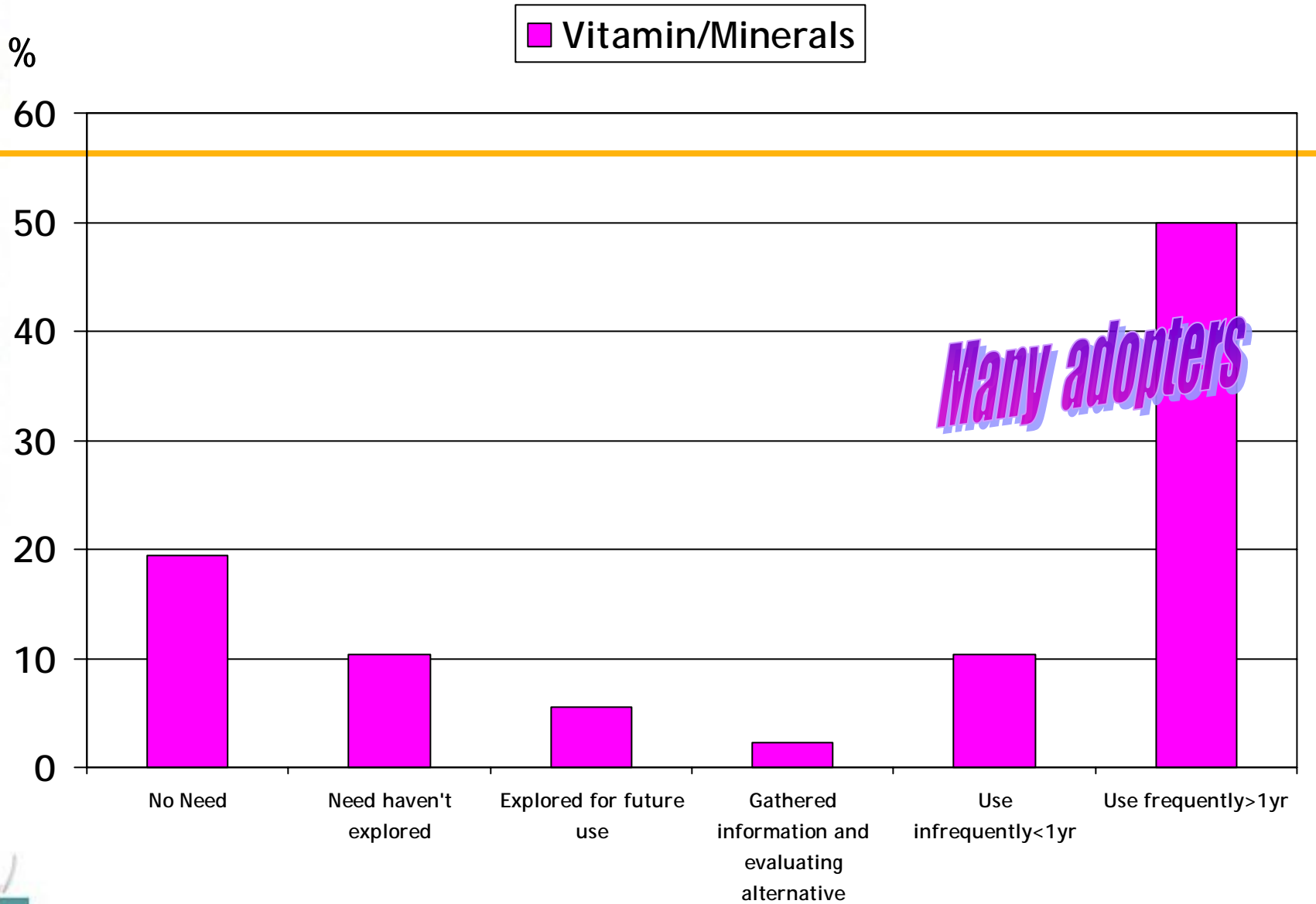
Are some people readier than others to use dietary supplements?

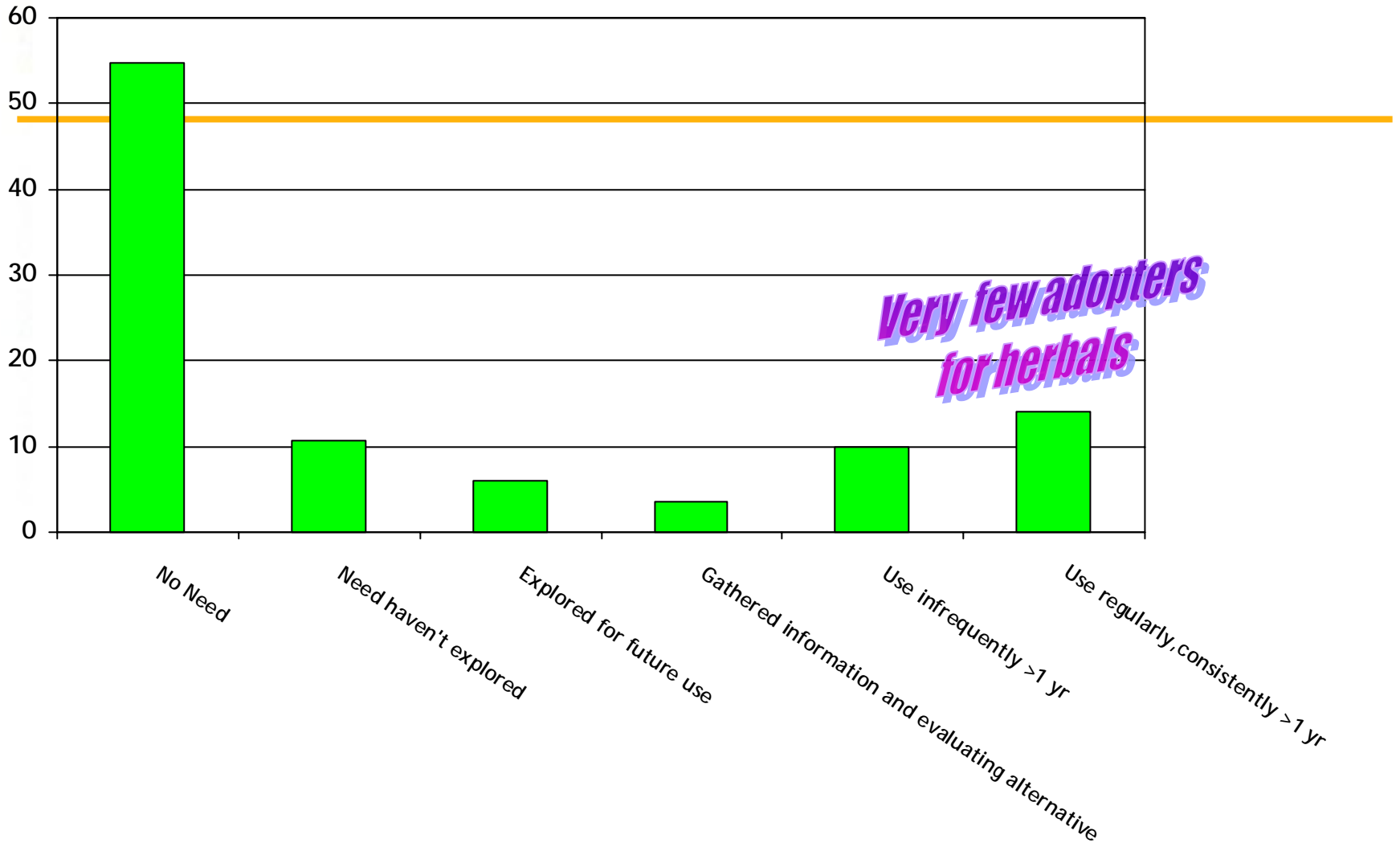


Readiness for behavioral change

- Prochaska: trans-theoretical model of readiness of behavioral change
- Readiness varies by types of DS





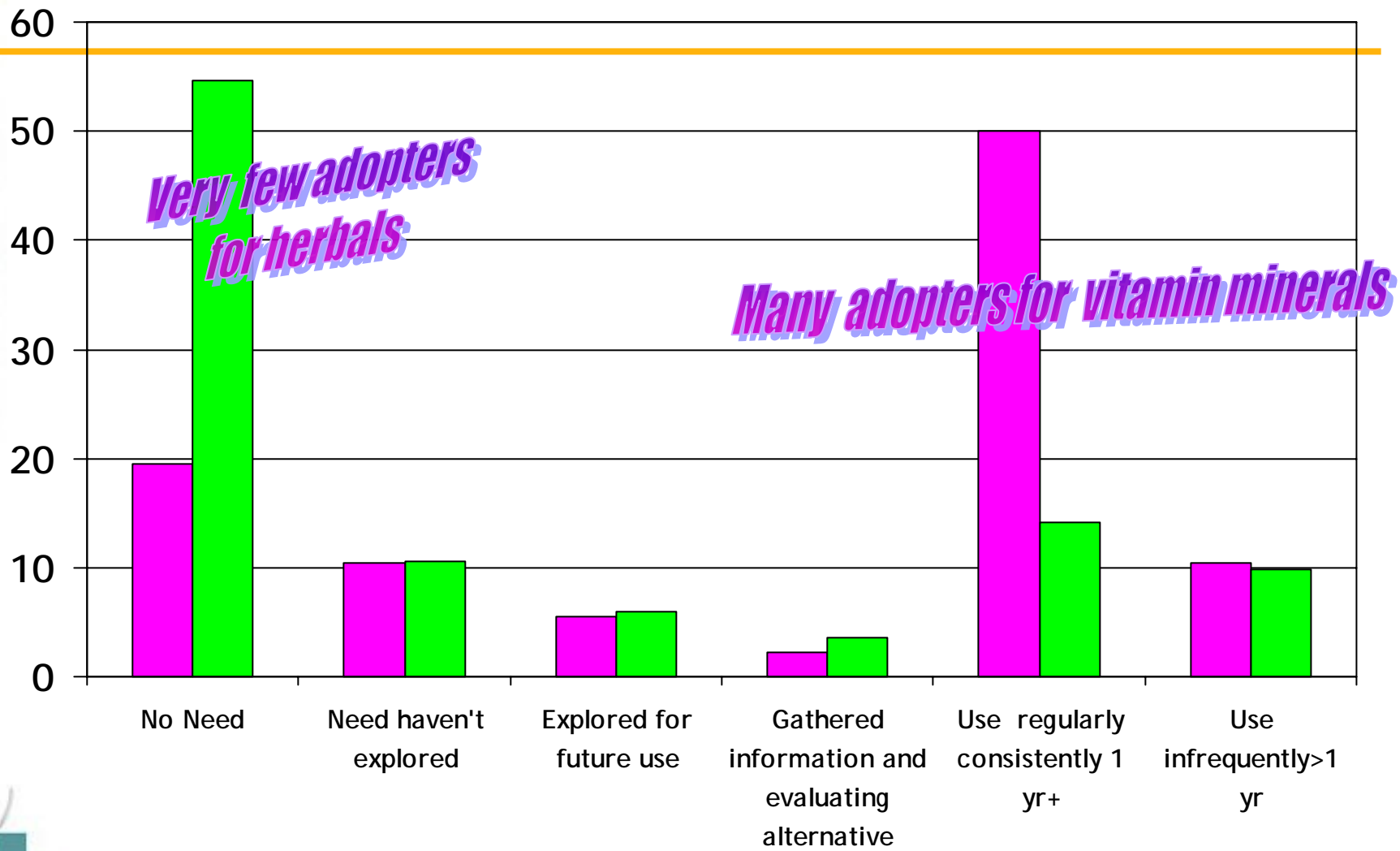


■ Herbals

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■ Vitamin/Minerals ■ Herbals



How are motivations and use of DS related?



Do motivations cause use?

- Knowledge-→ Attitudes-→ Use
motivations



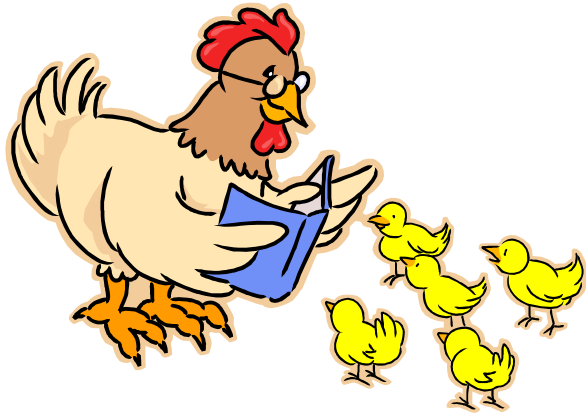
Or do people develop motivations to justify use???

motivations

- **Use → Attitudes → Knowledge**



Are motivations the chicken ??



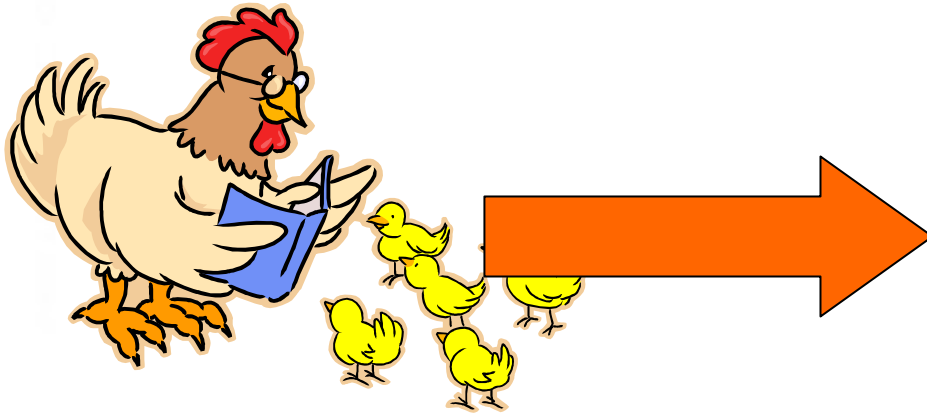
Motivations



Use



Or, are motivations the egg??



Use



Motivations



Implications for dietitians

Some people get in the habit and then find reasons for behavior

- Often due to social influence
- Others operate in a more deliberate manner
- ***Consider both ways to influence behavior when collecting information about dietary supplement use!***



Case: Women in reproductive age group and folic acid DS

- Some get into the habit of taking a folic acid supplement
- Others use only after appealing to logic and attitudes



Conclusions



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Conclusions

- Motivations for dietary supplement use complex
- Patterns of use vary depending on supplement



Implications for dietitians

- Many interactions between medications , drugs and dietary supplements
- ***Check about interactions!***
- ***Put interactions in the chart!***



Implications for dietitians

- Probe about dietary supplement use
- ***To get total dietary intake must include nutrient containing dietary supplements!***



Acknowledgements

- Funded by Office of Dietary Supplements, National Institutes of Health
 - <http://Nutrition.gov>
 - <http://ods.od.nih.gov>
- DSID group
- Thanks to Steve French and The Natural Marketing Institute (NMI) for analyses

www.NMIsolutions.com





DSID

Dietary Supplement Ingredient Database



Conclusions

- **USE**
 - People vary greatly in dietary supplement use
- **MOTIVATIONS**
 - A substantial minority of people think they are “deficient”; either in foods or nutrients or both
 - Motivations for use vary by
 - **person** (demographics, health status, readiness)
 - **supplement** (nutrient vs herbal/botanical)
 - Some people (nutrient supplement users) are more ready to use DS than others
- **IMPLICATIONS** for dietitians: always ask about DS

