

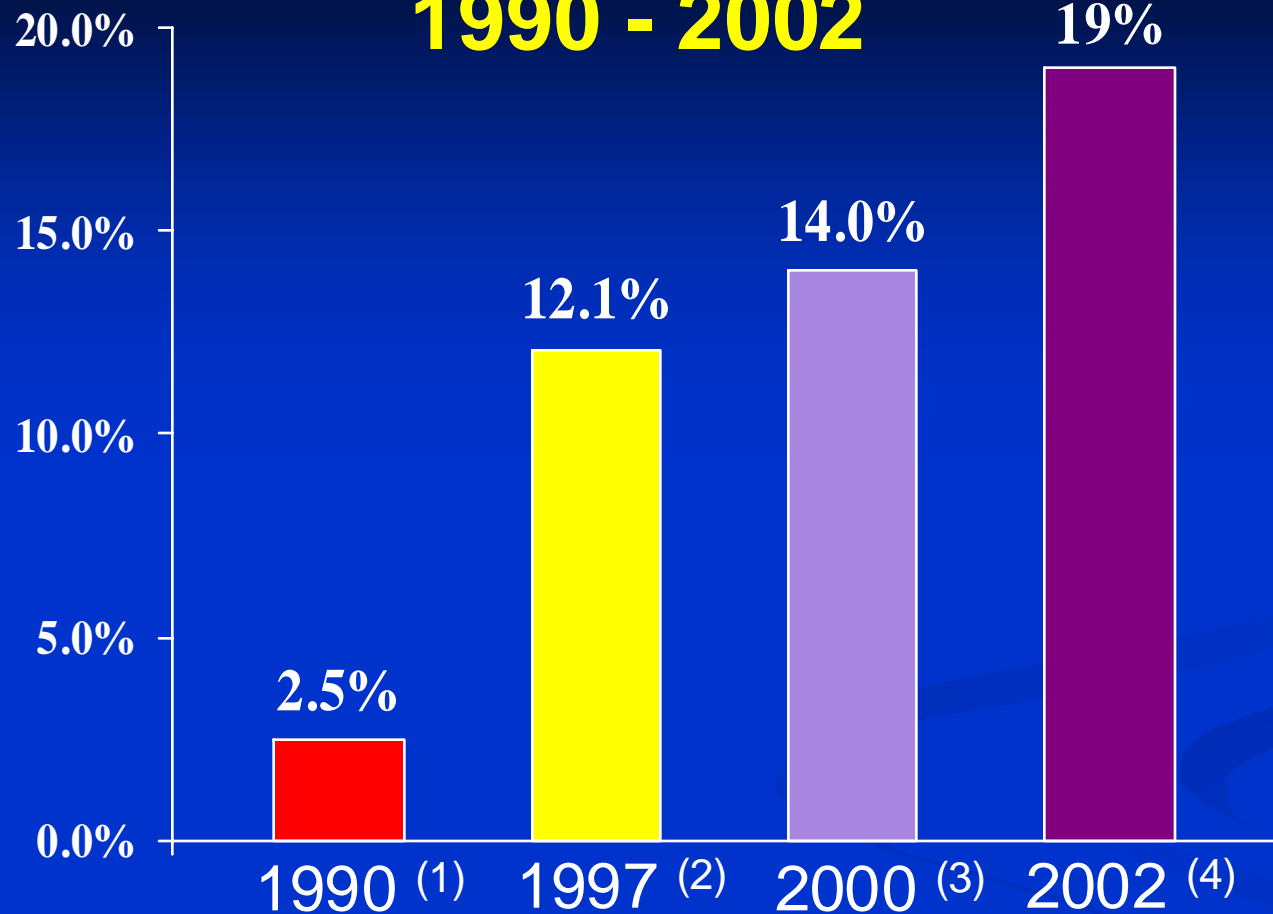
Herbs and Dietary Supplements Use Among College Age and Young Adults in the United States

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Outline of Presentation

- Epidemiology of non-vitamin/mineral dietary supplement use by U. S. population
- Data on non-vitamin/mineral dietary supplement use among 18 to 30 year old adults
 - NHIS
- Conclusions

Overall Herbal Therapy Use in the U.S. 1990 - 2002



Adult U.S. Population Using Herbal Therapies Past 12 Months

- (1) Eisenberg DM et al. *NEJM* 1993;328:246-252.
- (2) Eisenberg DM et al. *JAMA* 1998;280:1569-1575.
- (3) Kaufman et al. *JAMA* 2002;287:337-44.
- (4) NHIS (Barnes et al. CDC No. 343, 2004).

What about young adults in the US?

National Health Interview Survey

- The NHIS is an in-person household survey conducted by the Census Bureau for the National Center for Health Statistics
- 31,044 U.S. adults in civilian, non-institutionalized household population

Adults Aged 18 – 30 Years (n=6666)

“DURING THE PAST 12 MONTHS, did you use natural herbs for your own health or treatment?” (HDS)

YES N= 1171 (17%)

NO N= 5495 (83%)

Results

- 17 % (8.4 million) reported use of NVMS
- 22 % (5.5 million) of prescription medication users also reported NVMS
- 19 % of over the counter medication users also reported NVMS

Prevalence of NVMS Use

Variable	%	% NVMS USE
AGE		
18 –22 years olds	40	15
23 - 30 years olds	60	19
FEMALE		
	51	18
EDUCATION		
< High School	16	7
High School Graduate	24	15
Some College	40	19
College Graduate	19	25

Prevalence of NVMS Use

Race/ Ethnicity	%	% NVMS Use
Non-Hispanic White	64	19
Non-Hispanic Black	14	13
Non-Hispanic Asian	5	17
Non-Hispanic Other*	1	27
Hispanic	16	12
Income, \$		
<15,000	26	18
15,000-34,999	24	21
35,000-64,999	10	23
≥ 65,000	2	30
other	38	12

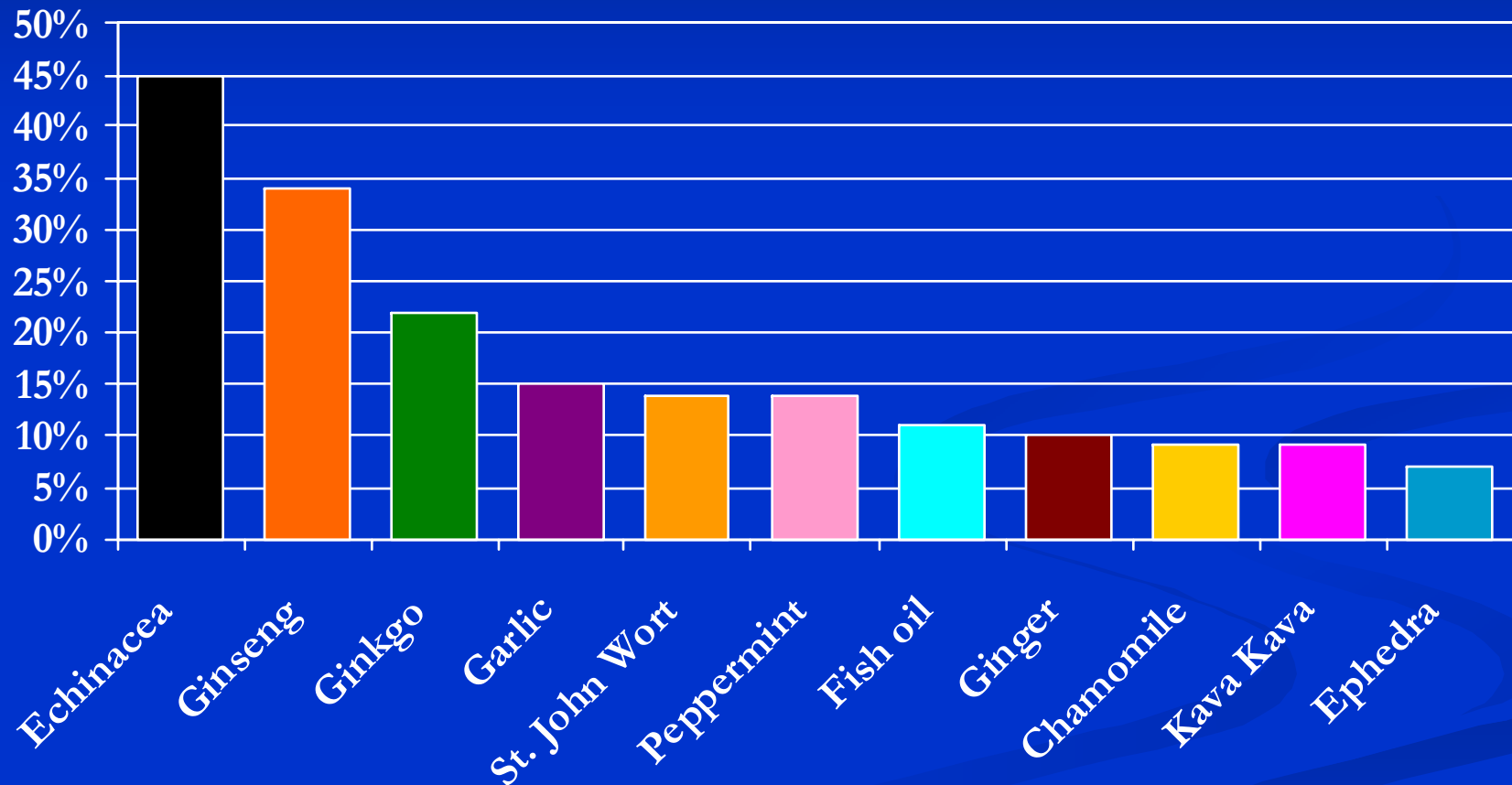
Prevalence of NVMS Use

	%	% NVMS Use
SELF PERCIVED HEALTH STATUS		
(Excellent, Very Good, Good)	96	17
(Fair, Poor)	4	21
PHYSICAL ACTIVITY		
Sedative	34	9
Moderate activity	22	19
High activity	43	23
PRESCRIBED MEDICATIONS	54	22
OVER THE COUNTER MEDICATIONS	76	19

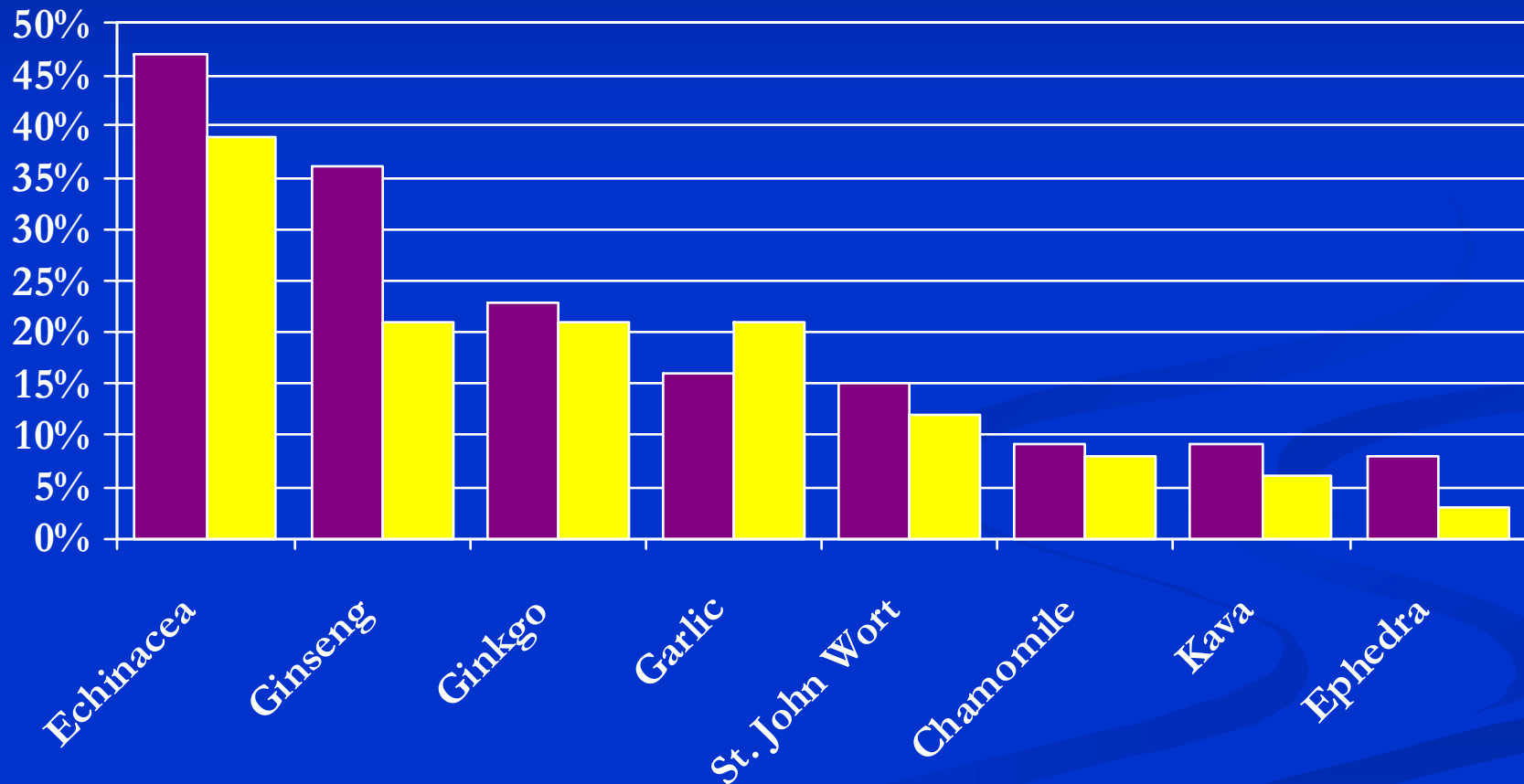
Prevalence of NVMS Use

	%	% NVMS Use
SMOKING STATUS		
Current	26	21
Former	9	24
Never	63	15
ALCOHOL USE IN THE PAST 12 MONTHS		
None	32	9
Infrequent/light	44	21
Moderate/heavy	21	24
Unknown drinking status	3	5

Figure 1. Among Non-vitamin dietary supplements user: prevalence of individual products

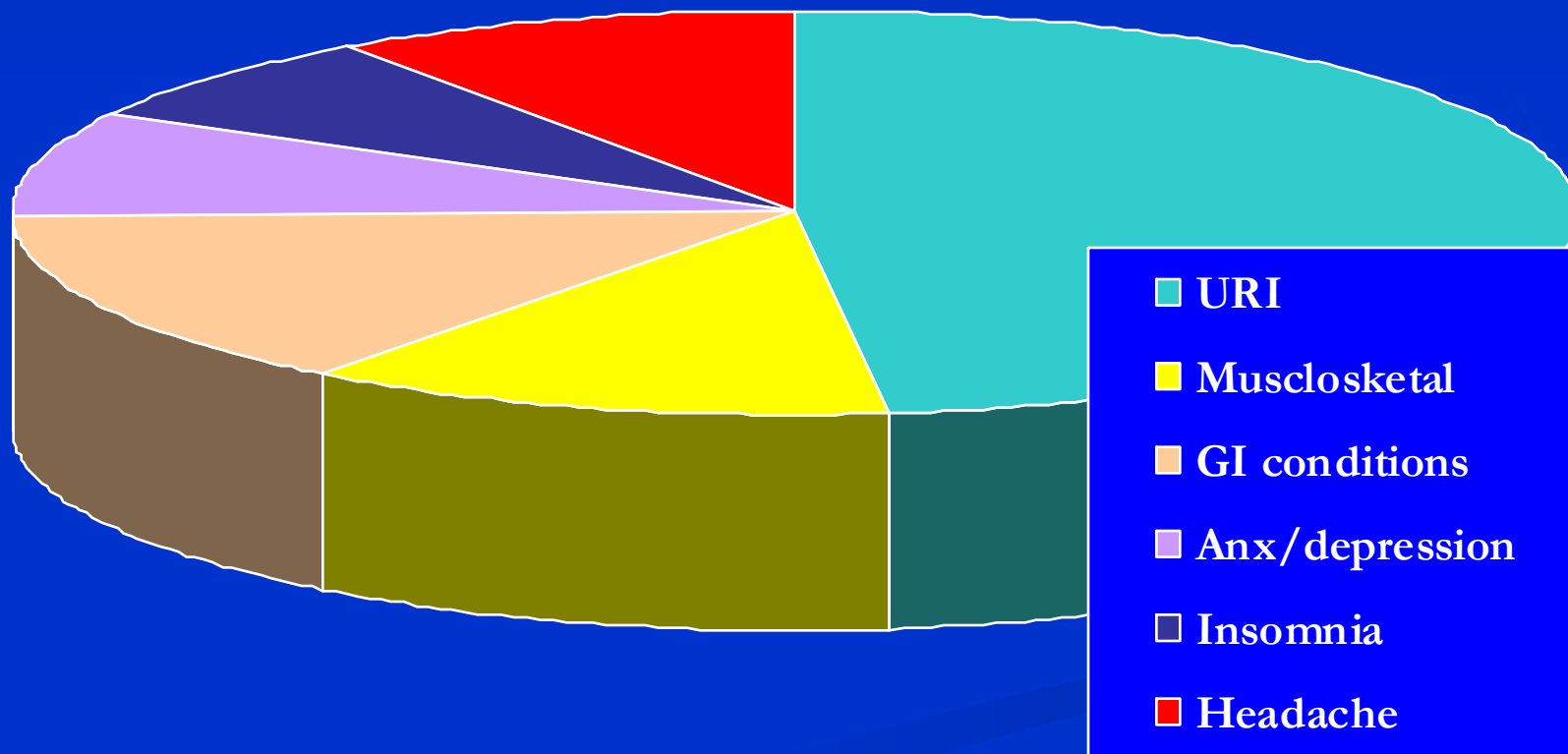


18 – 30 VS. > 31 years old NVMS Users



18 – 30 (purple) Vs. >31 years old (yellow)

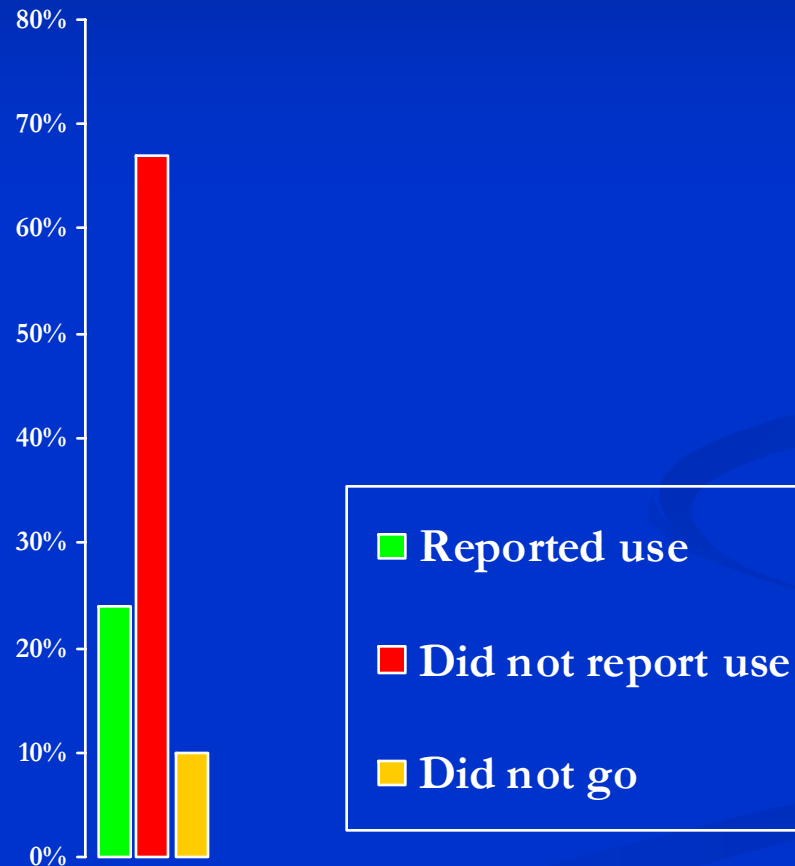
Specific Health Conditions Treated with NVMS



Factors associated with NVMS Use: Logistic Regression

- High physical activity 2.45 [1.98-3.03]
- Prescription medication use 1.51 [1.26-1.81]
- Over the counter medication use 1.13 [.91-1.40]
- Alcohol use 2.02 [1.53-2.65]
- Current 1.41 [1.16-1.72] or former smoker 1.50 [1.15-1.95]
 - Logistic Model adjusted for age, sex, race, income, education

Disclosure of NVMS Use to Conventional Medical Professional



*During last 12 months did you let any of these medical professionals know about your use of natural herbs?

Limitations

- Self-report data
- Term “Natural herbs” may have been misleading
- Only 35 listed - thousands are sold
- Herbs have unique common names based on the region or cultural background

Conclusions

- Nearly **one in five** young adults in U.S. population report using an NVMS
- Few young adults disclose NVMS use to a conventional medical professional
- Compared with older adults - high rates of use of Ephedra, Kava and other herbs with safety concerns

Acknowledgements

- Russell Phillips, MD
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Reason For NVMS Use

- 17% conventional medicinal treatment (CMT) would not help
- 15% CMT were too expensive
- 43% herbal therapy combined with CMT would help
- 10% suggested by a CMT professional
- 53% thought it would be interesting to try