

What's New in the NHANES Dietary Supplements Collection?



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U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Center for Health Statistics



National Health and Nutrition Examination Survey (NHANES)

Objective

To assess the health and nutritional status of adults and children in the United States.

National Health and Nutrition Examination Surveys

| <i>Survey</i> | <i>Dates</i> | <i>Ages</i> |
|---------------|--------------|-----------------|
| NHES I | 1960-62 | 18-79 years |
| NHES II | 1963-65 | 6-11 years |
| NHES III | 1966-70 | 12-17 years |
| NHANES I | 1971-75 | 1-74 years |
| NHANES II | 1976-80 | 6 mo.-74 years |
| HHANES | 1982-84 | 6 mo.-74 years |
| NHANES III | 1988-94 | 2 mo. + |
| NHANES | 1999- | All ages |

Goals of NHANES

U.S. population-based estimates of:

- Health conditions
- Awareness, treatment and control of selected diseases
- Environmental exposures
- Nutrition status and diet behaviors

Sample

- Civilian, non-institutionalized household population in the United States
- All ages

Oversample:

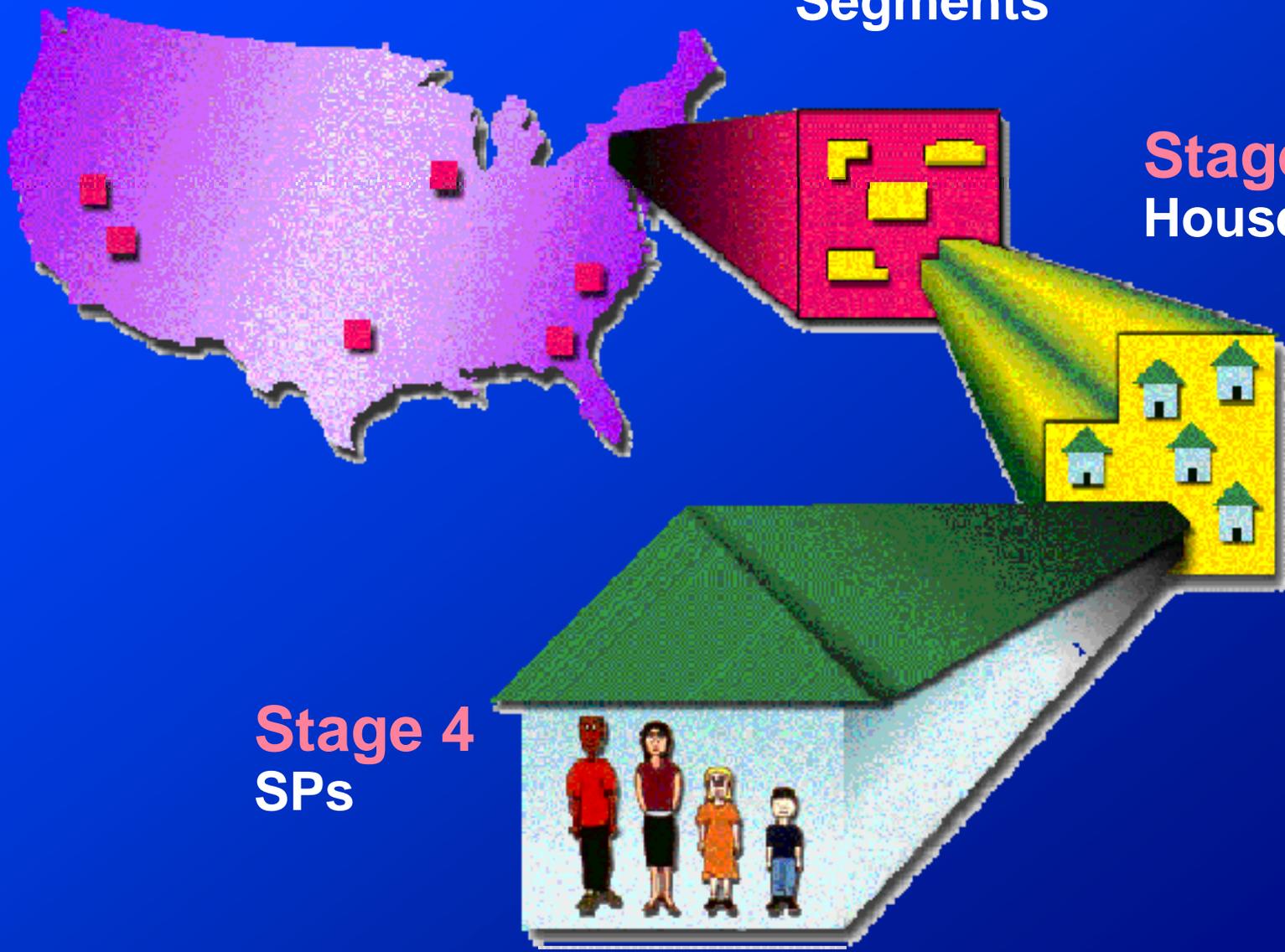
- African Americans
- Hispanics
- Older persons aged 60+
- Low income whites

Stage 1
Counties

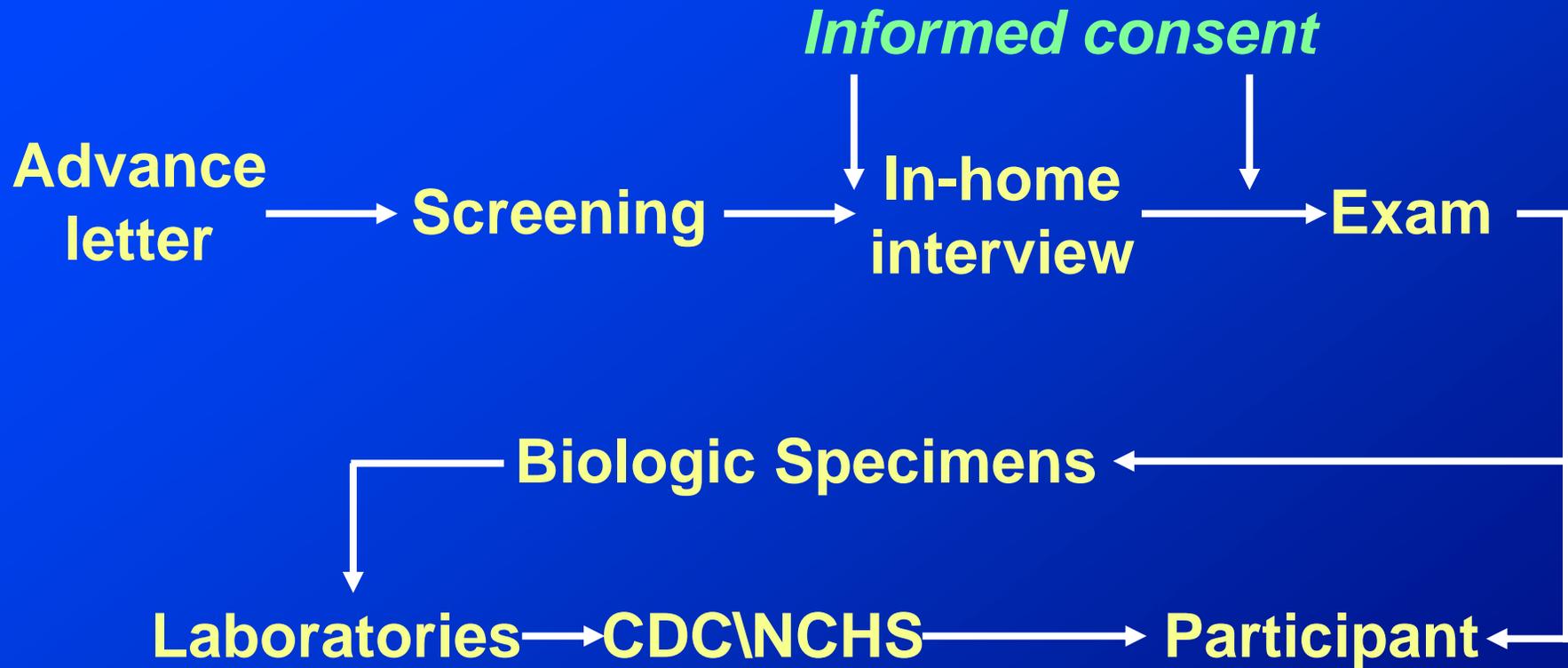
Stage 2
Segments

Stage 3
Households

Stage 4
SPs



NHANES information flow



NHANES Household Interview



- Doorstep screening
- Traditional CAPI interviewing with portable keyboard.



NHANES Mobile Exam Center

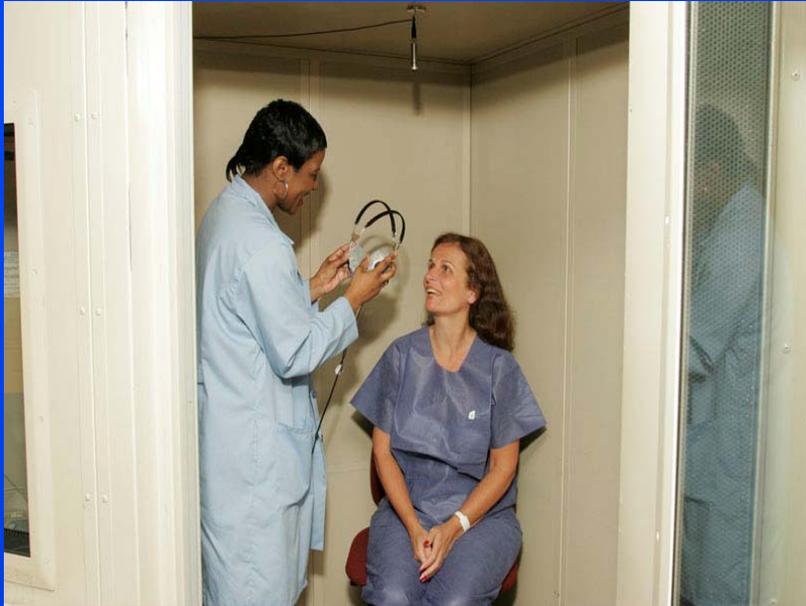


OP96S041

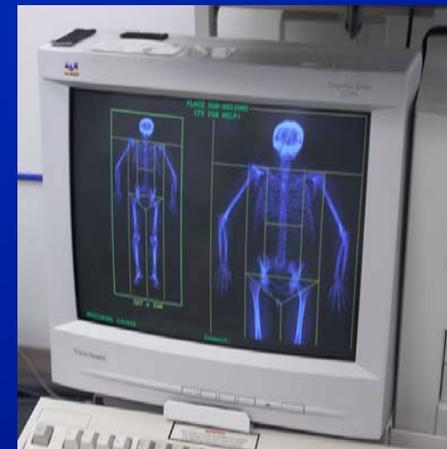
Cardiovascular health



Hearing and vision



Anthropometry and body composition



Private interviews



Oral health



Laboratory



NHANES response rates

1999-2007

Interviewed 81%

MEC examined 77%

What Dietary Supplements are Americans Taking?

- **NHANES is working on answering this question by:**
 - **Collecting dietary supplements data from individuals in a national probability sample**
 - **Compiling a dietary supplement database of ingredients and amounts reported on product labels**



Household Interview

- All ages (1999-present)
- Use of vitamins, minerals, herbals or other dietary supplements in the past 30 days, including prescription
- Use of antacids in the past 30 days
- Product usage
- New in 2007 – *reasons why they take the supplement*

Matching a reported supplement to a known supplement

- NCHS nutritionists review supplement names recorded by interviewers
- Match reported supplement with supplement in our dietary supplement database.
- If we do not have the supplement label already in our database, or the label information is outdated we obtain the label by:
 - Contacting the manufacturers or distributors for the product label, company websites, or other internet sources

Information entered in our Dietary Supplement Database

- **Supplement name**
- **Source of information (manufacturer, distributor, and other references such as the Internet and PDR.**
- **Product type (infant/pediatric, prenatal, geriatric, standard)**
- **Ingredient and dosage information**
- **Manufacturer and Distributor information**
- **Contact information**

New in 2007

- **All ages**
- **Dietary supplements taken during the same 24-hour period as dietary recall**
- **Two dietary recalls collected**
 - **Day of examination**
 - **3-10 days later, phone interview**



DSA

JOHN (25, M) Yr9.s219.v1

The next questions are about your use of dietary supplements, vitamins, minerals, and herbals all day yesterday, Monday, between midnight and midnight. prescription and over the counter dietary supplements. During the interview in your home you reported taking CALCIUM.

Did you take this supplement yesterday, Monday, (between midnight and midnight)?

[CONTINUE ASKING ABOUT EACH SUPPLEMENT LISTED IN TABLE]

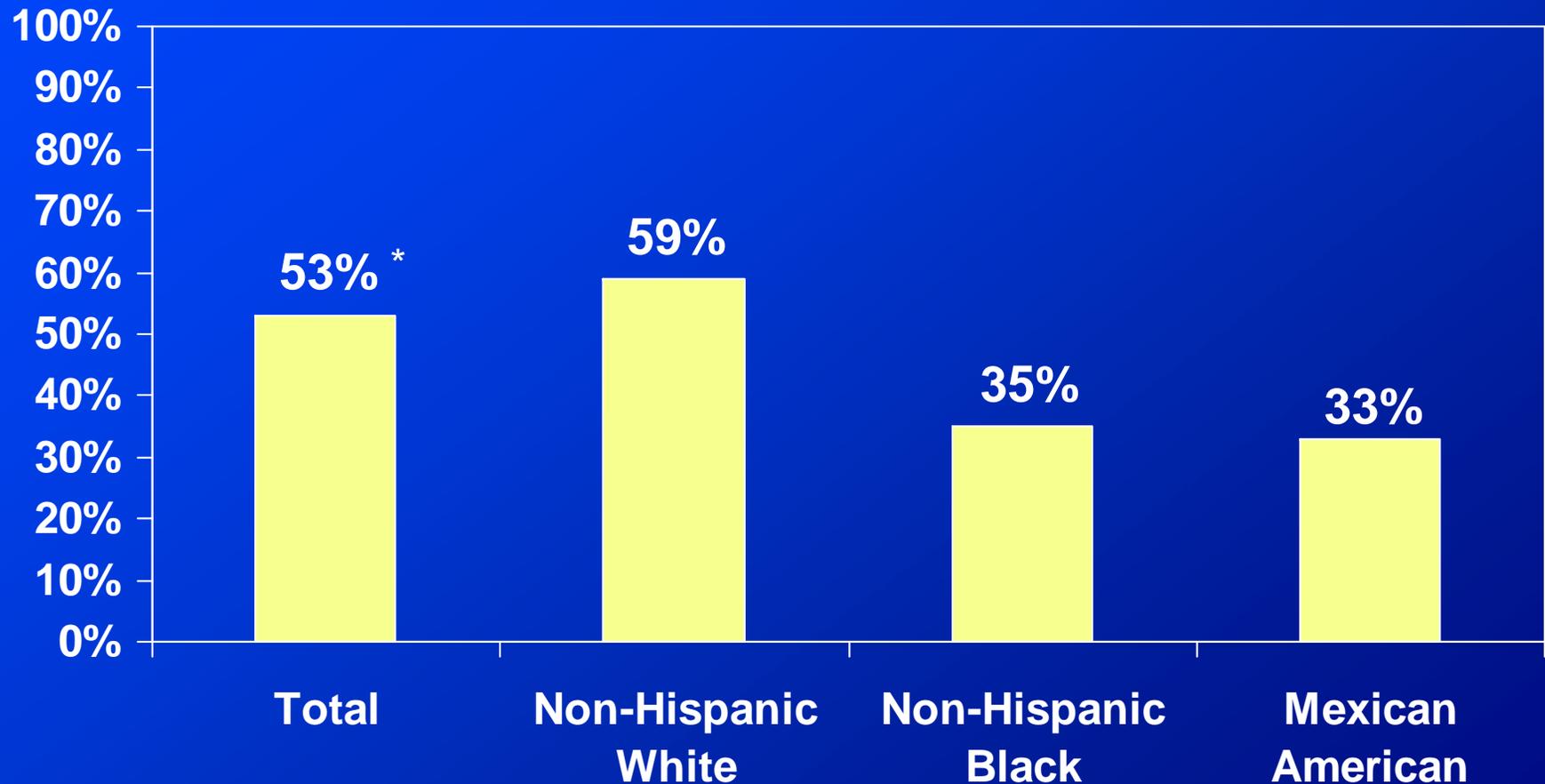
- 1. Yes
- 2. No

| Supplements | Pick List | 1st Nutrient Strength | 2nd Nutrient Strength | Container Seen | Taken Last 24 Hours | Form Taken | Quantity Taken | Unit Taken | Unit Taken OS | Liqu |
|----------------|-----------|-----------------------|-----------------------|----------------|--------------------------|------------|----------------|------------|---------------|------|
| CALCIUM | | 600 MG | | Yes | <input type="checkbox"/> | | | | | |
| VITAMINS A & D | | 1000 MG | 200 MG | Yes | <input type="checkbox"/> | | | | | |
| CM SUPER CALC | | | | Yes | <input type="checkbox"/> | | | | | |
| WALGREENSA T | | | | Yes | <input type="checkbox"/> | | | | | |

Adult Supplement Use

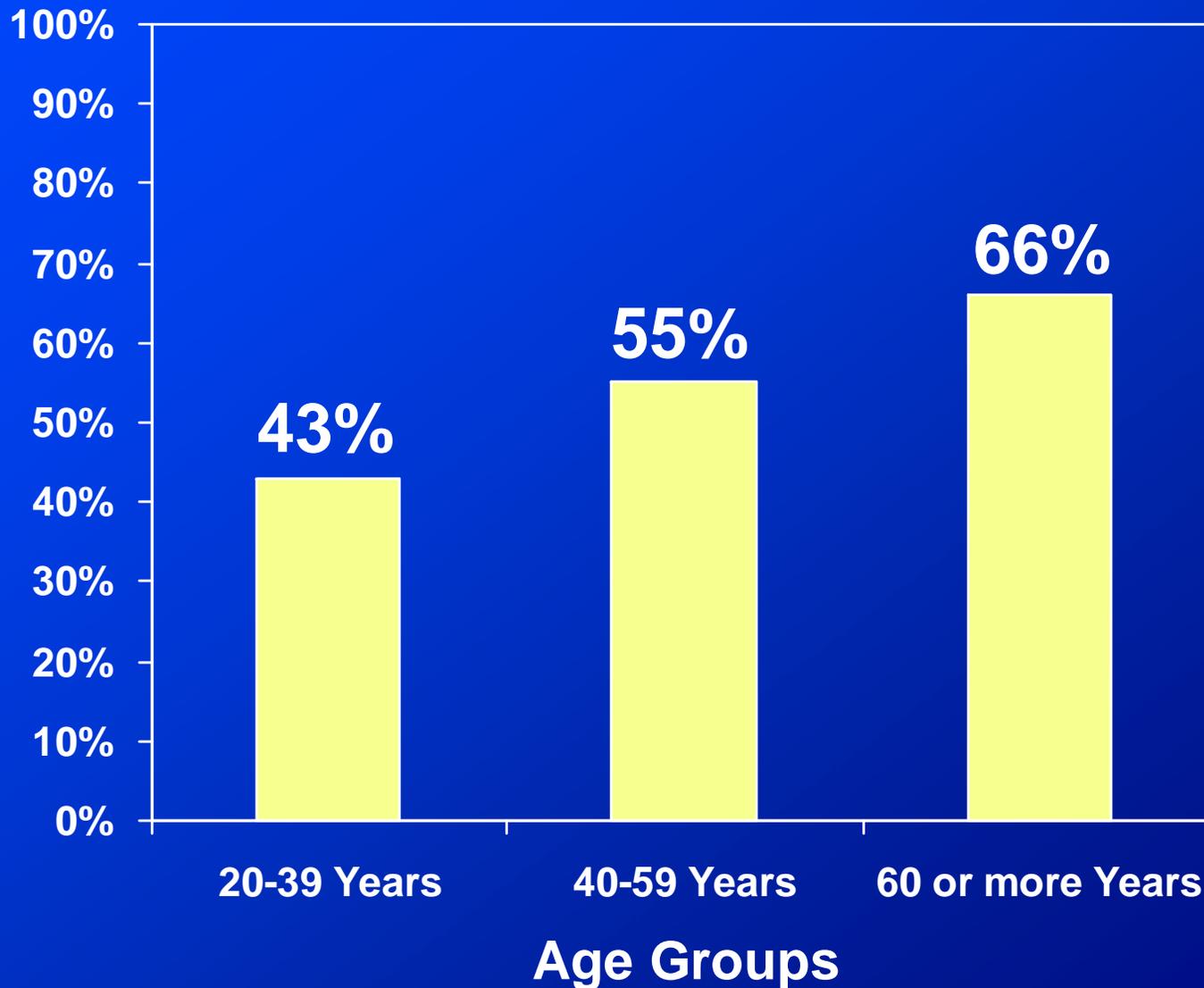
| Survey | Total | Men | Women |
|--------------------------------|-------|-----|-------|
| NHANES I '71-73 (no ref time) | 33% | 28% | 38% |
| NHANES II '76-80 (no ref time) | 35% | 32% | 43% |
| NHANES III '88-94 (30 days) | NA | 36% | 48% |
| NHANES '99-04 (30 days) | 53% | 47% | 58% |

Prevalence of Adult (≥ 20) Supplement Use, by Race/Ethnicity: NHANES 1999-2004

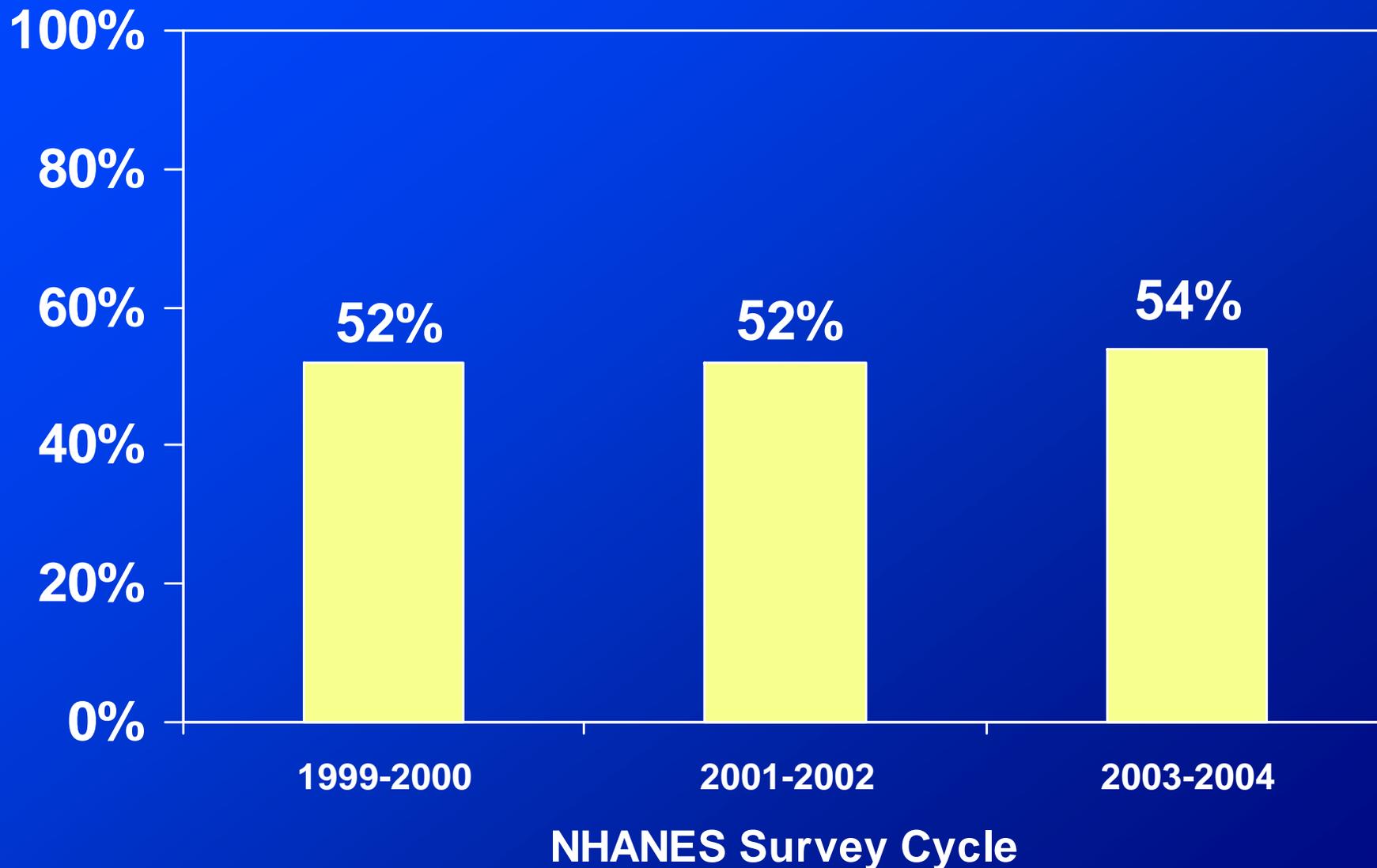


*Persons of other race and ethnicity are included in the total.

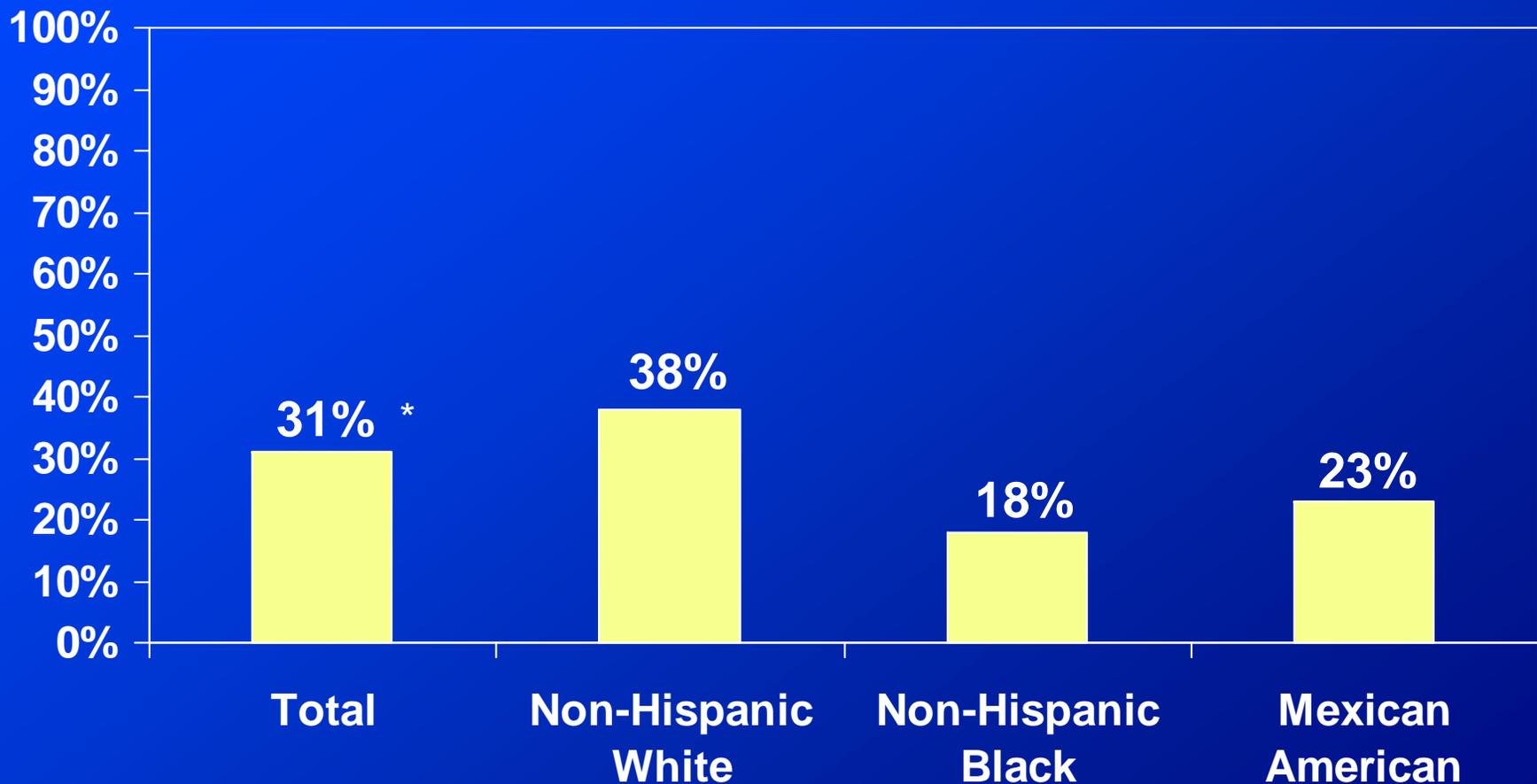
Adult Supplement Use, by Age Group



Adult Supplement Use, by NHANES Survey Years

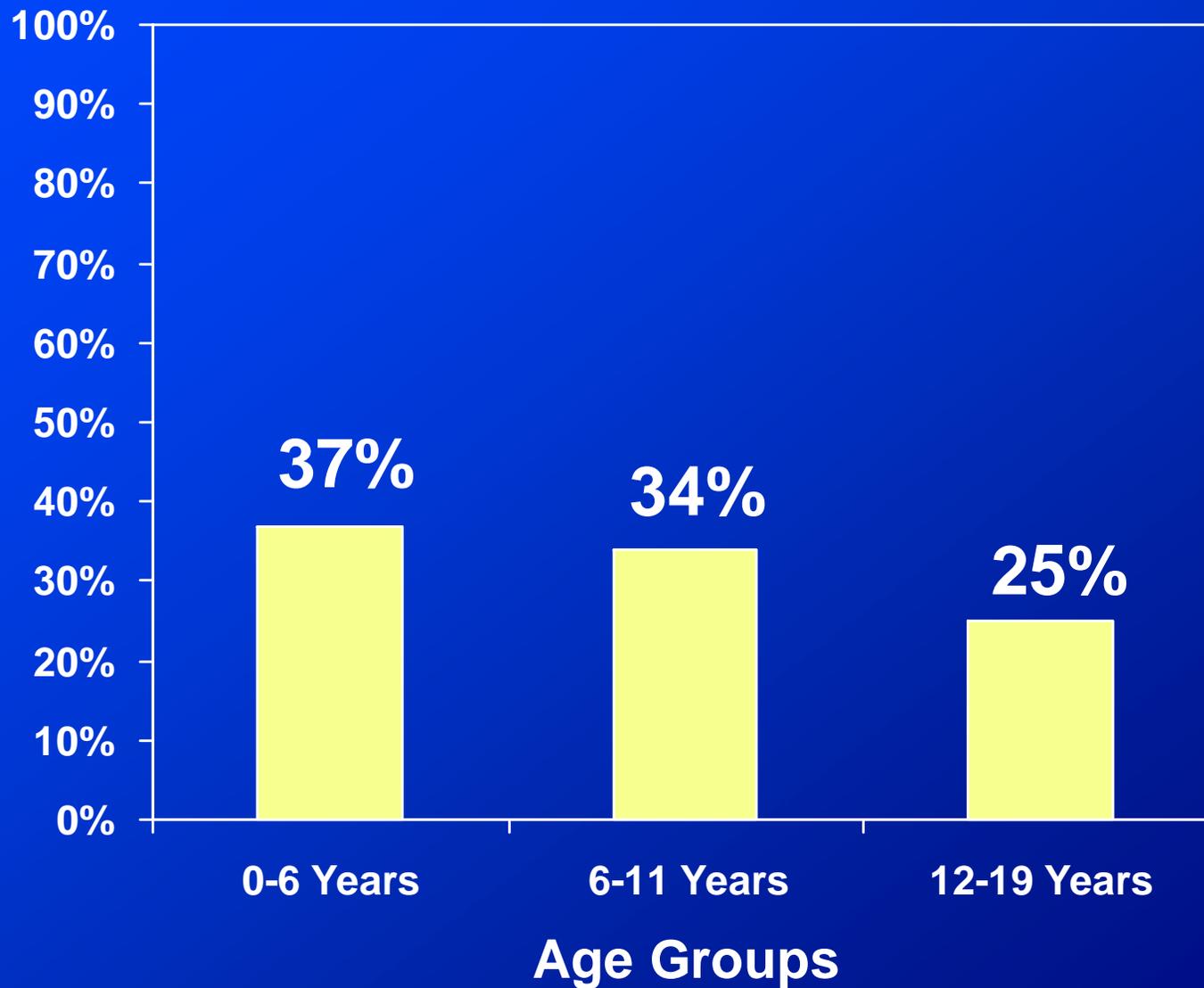


Prevalence of Supplement Use for Children (0-19), by Race/Ethnicity: NHANES 1999-2004

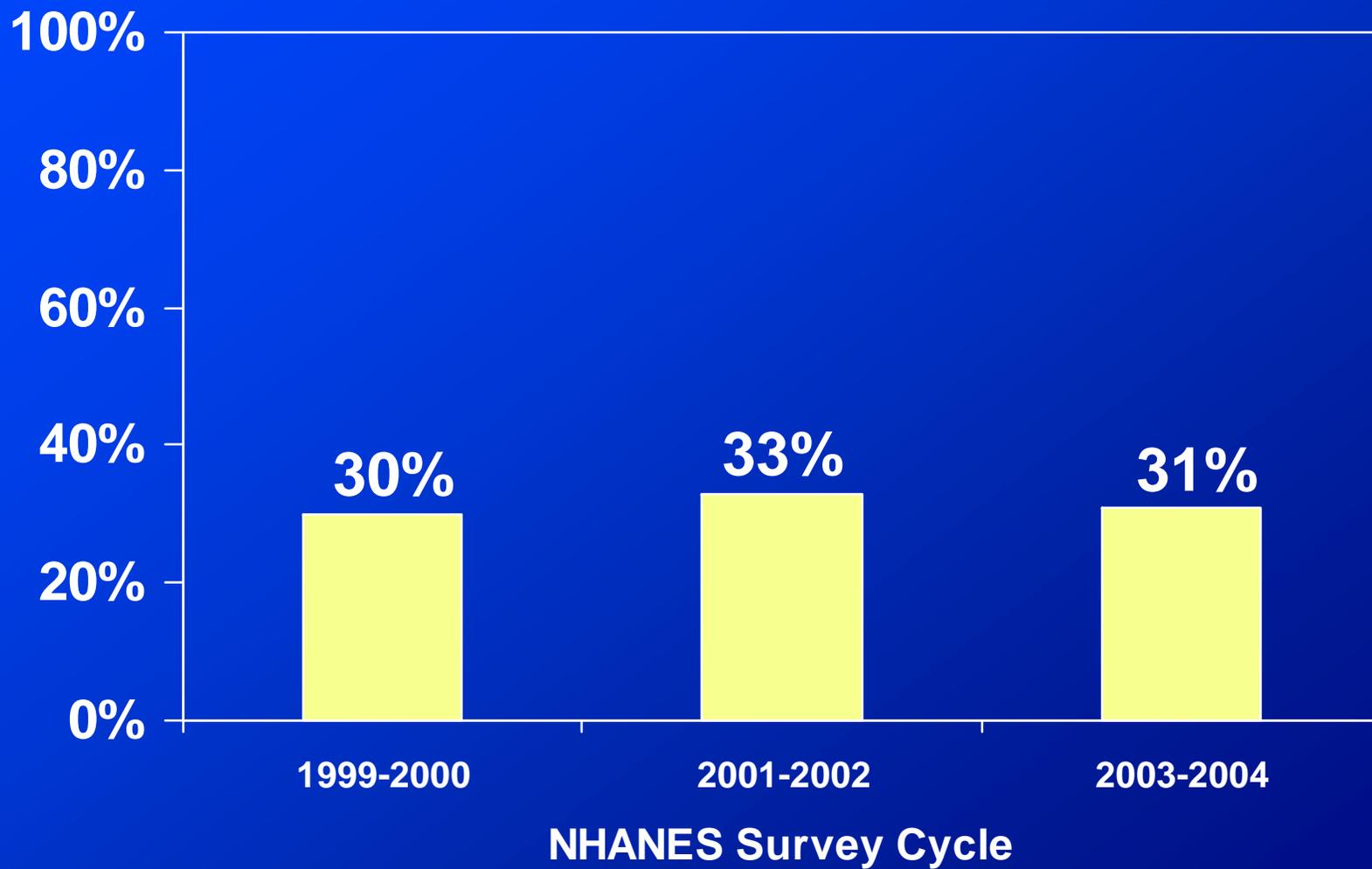


*Persons of other race and ethnicity are included in the total.

Supplement Use for Children, by Age Group



Supplement Use for Children, by NHANES Survey Years



Data release process

- **QA/QC**
- **Editing/cleanup**
- **Weighting**
- **Data preparation**
- **Documentation**
- **Confidentiality review**

Survey data release schedule

- **2-year datasets**
- **Website data release**
- **Continuous NHANES data available:**
 - 1999-2000
 - 2001-2002
 - 2003-2004
 - 2005-2006

Coming soon...

- **Dietary Supplements Data 2005-2006**
- **24 Hour Dietary Recall 2005-2006**
- **Food Frequency 2005-2006**

nchs National Center for Health Statistics

Monitoring the Nation's Health



National Health and Nutrition Examination Survey

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New and Updated Content

| | | |
|---------|--|--|
| 3/28/08 | | The NHANES I Web Tutorial is now available! |
| 3/28/08 | | The NHANES II Web Tutorial is now available! |

Canadian Health Measures Survey- NHANES Partnership

- **Collaboration began at the inception of CHMS**
- **Numerous joint meetings—e. g., general procedures, biospecimen storage**
- **CHMS staff attended NHANES training and participated in NHANES dry-runs**
- **NCHS representation on CHMS committees**
- **Sharing of protocols and experiences**
- **NHANES assistance with trailer design, manufacture and set-up and loan of 2 trailers**

CHMS-NHANES Partnership: Next Steps

- **Facilitate further collaboration**
- **Ensure data comparability**
- **Share lessons learned from CHMS**
- **Develop comparative analyses**
- **Preserve corporate memory**

Climate Challenges

U.S.

CANADA



www.statcan.ca/chms



<http://www.cdc.gov/nchs/nhanes.htm>