Multivitamin/Mineral Usage, Body Mass Index, and Exercise Among College Students

Christie Mastroiano, Leah Tully, and Jesse Stabile Morrell

Nutrition Program; Dept. of Molecular, Cellular, and Biomedical Sciences
University of New Hampshire, Durham NH, USA

**Introduction**
Over the past forty years the use of dietary supplements in the United States, including multivitamin/minerals (MVM) has increased by more than 40% (1). In 2006, 59% of the American population reported taking MVMs (2). Very few studies have examined MVM use in the college aged population. It is unknown if MVM usage among young adults is correlated to other healthy behaviors such as regular exercise.

MVM usage has been linked to increased physical activity levels in adult populations (3). For certain individuals MVM use assures adequate intake of essential nutrients (3). Very few studies have examined MVM use in the college aged population. It is unknown if MVM usage among young adults is correlated to other healthy behaviors such as regular exercise.

**Methods**

- **Subjects:** Participants, 18-24 years, were recruited from the ongoing College Health and Nutrition Assessment Survey (CHANAS) at the University of New Hampshire between 2005 and 2011 (73% female, N=5119). Participants without measured anthropometrics or reported multivitamin data were excluded (n=485). All individuals provided written consent to participate prior to assessment. UNH IRB # 1329, 5524.

- **Anthropometric Assessment:** Height and weight were measured via calibrated digital scale and stadiometer by trained research personnel. Body mass index was calculated (kg/m²).

- **Questionnaires:** A multi-item questionnaire and health record were completed by participants. MVM data were taken from the wellness questionnaire while data regarding frequency of exercise was obtained from a health history questionnaire.

- **Data & Statistical Analysis:** Data analysis were performed via SPSS (v.21). Differences between groups (i.e. genders and MVM users vs. non-users) were considered significant when p<0.05 and are indicated by *.

**Data & Statistical Analysis**

- **BMI Comparison**

  - **Users (n=1669)**
    - 23%
    - 5%
    - 68%

  - **Non-Users (n=3450)**
    - 22%
    - 69%

**Key Findings**

- Thirty-three percent of students report taking a MVM.
- BMI did not differ between MVM users and non-users (p=0.73) but was higher among males than females (p<0.05).
- Thirty-seven percent of students reported exercising ≥5 times per week.
- MVM users were more likely than non-users to exercise ≥5 times per week (44% vs. 34%, p<0.05).

**Study Design**

- **Participants:** 5,119 students from the University of New Hampshire between 2005 and 2012 (73% female, N=5119). Participants without measured anthropometrics or reported MVM data were excluded (n=485). All individuals provided written consent to participate prior to assessment. UNH IRB # 1329, 5524.

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**Conclusion**

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**Acknowledgements**

- NH Agriculture Experiment Station, Danielle Dubois, Evagelia Georgakilas

**References**

1. Galche J et al. NHCS Data Brief No. 61. 2011