**Background and Objectives:** Vitamin D deficiency is highly prevalent and can be associated with adverse health outcomes. Few studies have evaluated the effects of daily consumption of milk fortified with a high dose of vitamin D in a large cohort of healthy postmenopausal women. Our objective was to determine the effect of daily intake of milk enriched with vitamin D [with or without fructooligosaccharides (FOS)] on vitamin D status, bone mass and cardiovascular risk factors.

**Design, Setting and Patients:** This was a 2-year randomized controlled study in which five hundred healthy postmenopausal women (mean age 58.1±4.8 years) were assigned to receive 500 ml/day of a dairy product to one of three groups:

- Control group (C) with skimmed milk (120 mg/100 ml calcium and vitamin D 0.75 ug/100 mL)
- Group A with skimmed milk enriched with calcium and vitamin D (180 mg/100 mL and 3 ug/100 mL)
- Group B with skimmed milk enriched with calcium and vitamin D (180 mg/100 mL and 3 ug/100 mL) and FOS (5 g/L).

- We evaluated serum levels of 25-OH-vitamin D. We also measure anthropometric parameters, biochemical data of glucose metabolism and lipid profile, and body composition by electrical impedance.
- Preliminary results showing changes in vitamin D concentrations in 292 posmenopausal healthy women after 12 months of the nutritional intervention are presented.

**Results:**

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Group A</th>
<th>Group B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (years)</td>
<td>58 ± 4</td>
<td>58 ± 5</td>
<td>58 ± 5</td>
</tr>
<tr>
<td>BMI (Kg/m²)</td>
<td>27.3 ± 4.4</td>
<td>29 ± 5</td>
<td>27.5 ± 4.5</td>
</tr>
<tr>
<td>Vitamin D (mg/ml)</td>
<td>22.2 ± 7.5</td>
<td>21.5 ± 6.5</td>
<td>23.7 ± 10.7</td>
</tr>
</tbody>
</table>

**Figure 1. Changes in vitamin D concentrations after 12 month intervention**

**Figure 2. Percentage of women reaching adequate vitamin D concentrations according to group of intervention**

*P<0.01 for the comparison between Group A and Group B with control group

**Conclusions:** Preliminary data confirms that daily intake of milk highly enriched with vitamin D, with or without FOS, in postmenopausal healthy women induces a significant improvement in vitamin D status.

Conflicts of interest: none.