Missing Teeth in America

A U.S. Consumer Survey on Prevalence, Consequences and Treatment

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Methodology and Objectives:

The data below summarizes findings from an extensive study conducted by Nobel Biocare North America during the summer of 2008. This appears to be the largest consumer survey ever conducted in the field of implant dentistry.

- Research consisted of an online survey sent to more than 2,400,000 people throughout the United States.
- 54,680 of those responded.
- The sample was weighted in terms of age, income, and geography to be consistent with U.S. census data for adults over 25 years old.
- Results of the cross-tabulations were noted only if they were statistically significant (at 95% confidence interval).

Purpose:

To better understand the prevalence of missing teeth among adults in the United States as well as to probe into consumer awareness of the consequences of missing teeth and available treatment options.

Findings:

The most important findings are listed below.

- **Prevalence:** Almost one-half of adults in the United States have missing teeth.
- **Income:** There is a negative correlation between income and the incidence of missing teeth; however, 33% of adults in households with income of $75,000 or more also have missing teeth.
- **Impact of missing teeth:** Respondents were asked to rank the importance of a variety of physical features, including hair, skin, eyes, etc. *Smile* and *Appearance of Teeth* scored the highest in terms of importance to personal appearance; these categories also had the largest gap between importance ratings and satisfaction levels. ***See Figure 1***.
- **Awareness of consequences of missing teeth:** Respondents had highest awareness of "visible" consequences of missing teeth (difficulty chewing, shifting of surrounding teeth, impact to appearance of smile); however, there was limited awareness of other health consequences, especially possible bone resorption. ***See Figure 2***.
- **Awareness of dental implants:** Awareness of dental implants was strong, with almost 70% of all respondents indicating that they had heard of dental implants. Although more than 80% of consumers with missing teeth were aware of dental implants, they were almost three times more likely to have been treated with a fixed bridge. ***See Figure 3***.

Figure 1:
Importance vs. Satisfaction

Figure 1 *illustrates the gap between the importance and satisfaction level of* Smile *and* Physical Appearance.

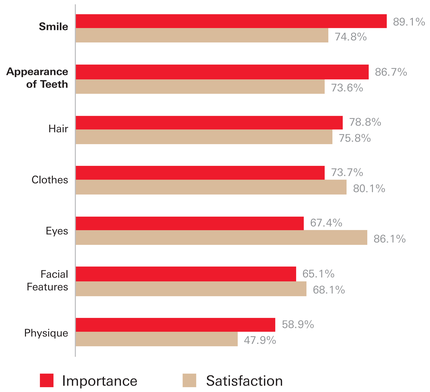


Figure 2:
Awareness of Consequences of Missing Teeth

Figure 2 *illustrates awareness levels of consequences of missing teeth. Respondents that were concerned about their missing teeth were typically more aware of the potential long-term consequences.*

		Awareness by Missing Teeth Concern	
	Total	Not Concerned	Concerned
Sample Size – Have Missing Teeth	**26,422**	**11,582**	**9,130**
Difficulty chewing food	59.0%	52.1%	66.5%
Shifting of surrounding teeth to fill gap	52.4%	52.8%	54.9%
Impact to appearance of smile	50.0%	41.2%	61.4%
Impact to overall facial contour (sunken face)	37.2%	31.6%	44.4%
Loss of jaw bone	24.2%	20.2%	28.3%
Increased risk of heart disease*	10.7%	7.6%	14.9%
I have not heard of any of the above	20.2%	24.3%	15.4%

*When periodontal disease is related to tooth loss.

Figure 3:
Awareness of Treatment Options

Figure 3 *illustrates the percentage of consumers with missing teeth who had heard of, considered, or who had already received treatment for missing teeth.*

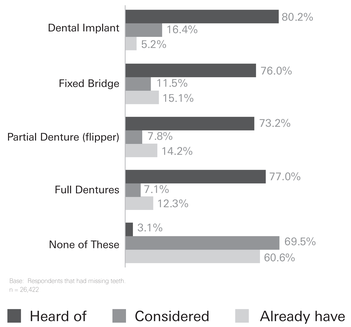
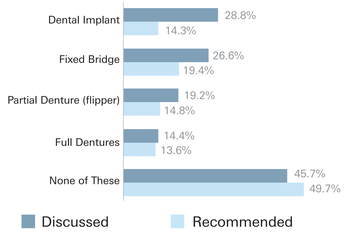


Figure 4:
Treatment Options Discussed with Dentist

Figure 4 *illustrates treatment options respondents discussed with their dentist and, of those options, what percentage were recommended.*



Findings *(continued)*

- **Awareness of benefits of treatment options:**
  - **Dental implants:** The majority of respondents showed high awareness levels of the following two benefits of dental implants:
    1. Can potentially last a lifetime
    2. Maintenance is similar to natural teeth
  - **Fixed bridge:** Patients who "already had" or whose "dentist recommended" a fixed bridge had higher awareness of the negative implications of a fixed bridge regarding the preparation of adjacent teeth. Surprisingly, only 40% of those that had a fixed bridge were aware that it is not permanent.
- **Most widely discussed treatment options:** Dental implants were the most widely discussed treatment option by clinicians; however, the participants often did not perceive a strong recommendation from their dentist for dental implants. Furthermore, the fixed bridge was the most widely accepted form of treatment. ***See Figure 4***.
- **Concerns about dental implant treatment:** Respondents were very concerned about the cost, the duration of the treatment and the perceived pain of the procedure.

Conclusions:

This study identified a significant unmet need to provide more thorough education to consumers about the consequences of tooth loss and potential treatment options.

A considerable challenge is the large proportion of the potential market who are "not concerned" about their missing teeth. This could be linked to the relatively low awareness of the more "serious" impacts of missing teeth.

Consumers have a high awareness level of the "visible" consequences of missing teeth, such as difficulty chewing, shifting of surrounding teeth, and a less attractive smile. They have very low awareness of other potentially serious health effects, especially possible resorption of the jaw bone (24.2% awareness).

The dentist is a key source of information for patients, especially those with higher income, yet dental implants is the treatment that has the largest gap between "discussed" and "recommended" by dentists.

There is relatively low awareness of the "drawbacks" of a fixed bridge. Only one-third are aware that it is not a permanent solution, with only 40% of those that have a fixed bridge being aware that it is not a permanent solution.

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