Introduction to EMG Weiner, Tony Tufano Group Names

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Table 1

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Condition	Interval	Minimum mV	Maximum mV	ΔmV
Jaw Clenching	0-5 s	1.001	1.22	.87
	5-10 s	.92	3.23	.87
Chewing soft object (replace)	0-5 s	.753	1.53	.93
	Chewing interval	8.63 s	7.21 s	30 s
Chewing hard object (replace)	0-5 s	.853	1.16	.84
	Chewing interval	5.43 s	6.32 s	30 s
Chewing medium object (replace)	0-5 s	.83	1.23	.75
	Chewing interval	15.53 s	15.93 s	30 s

Import graphs with descriptions

DATA ANALYSIS

- 1. Rank, in order (from greatest to least), the amplitude of EMG electrical activity for each of the items tested: sandwich, mint, chewing gum.
 - 1. Sandwich
 - 2. Mint
 - 3. Chewing gum
- 2. Compare the frequency of muscle activation during mastication (chewing) of the three food items tested. Is there a significant difference in the number of similar spikes generated during a 5 s interval of data collection for each of the items tested?

For the sandwich, there were many spikes. For the mint there were a couple big spikes, like when I first bit down on it. For the chewing gum there all pretty small.

- 3. Compare rates of chewing within your lab group/class. Are there significant differences? Yes there are. Other groups may have chewed their gum clower, or faster. Everyone is different.
- 4. On the basis of the findings in this experiment what recommendation would you make to a friend with a temporomandibular disorder (TMD) regarding his/her food choices?

I would suggest that they eat food that has a softer texture so that the jaw is not so tense and so they could chew food with ease.

5. The "Iron Jaw Trick" is a popular circus act in which a performer (or two performers) hang from a trapeze by his/her teeth. What exercises might someone do to strengthen the masseter muscles of the jaw so that a trick of this type could be performed successfully?

You would have to do a lot of opening and closing exercises. You would have to get your jaw used to clenching tightly. You should put your hands on the Masseter muscles, it has been said that helps to strengthen the muscles so that you will be able to perform the trick.

6. Chronic headaches and temperomandibular disorders (TMD) may be the result of unconscious clenching of the jaw. What are some ways to reduce/prevent jaw clenching?

When you sleep, wear a mouth guard. It reduces grinding of the teeth and unneeded clenching. You could also massage your jaw muscles to make sure they are relaxed and you will be fine.