

## Attachment 12

### Toolbox Taste Test

**Name of test:** Toolbox Taste Test  
**Estimated Time Burden:** 5 minutes

**Instructions to participant:**

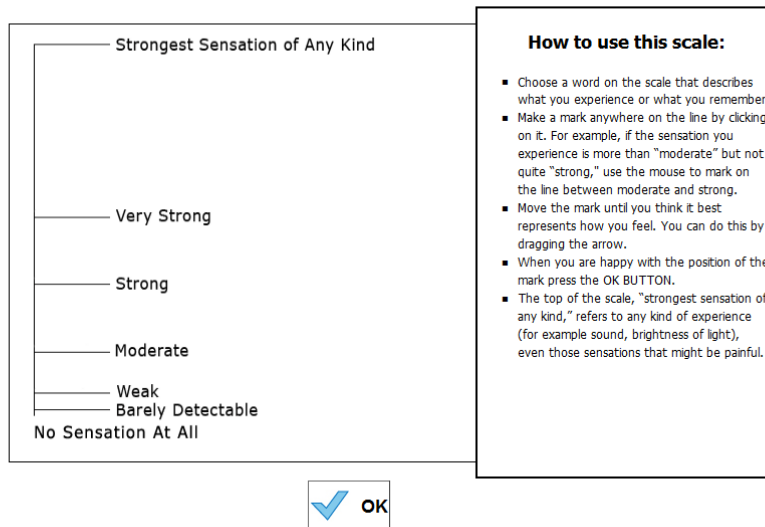
Introduction: **“Now I am going to test your sense of taste. To do this we will be using a salty flavor and a flavor found in tonic water.”**

**“Before the tasting, I am going to ask you to use this scale to rate how weak or strong some sensations are to you. Some of these sensations are things that you will experience. Some of these sensations are what you will recall experiencing in the past.”**

**“This scale ranges from ‘no sensation’ at the bottom to the ‘strongest imaginable sensation of any kind’ at the top.”**


**“The top of the scale (Strongest Imaginable Sensation of Any Kind) refers to any kind of experience, for example sound, brightness of light, even those sensations that might be painful.**

**“This is how you use this scale.”** Demonstrate how the participant can use the mouse pointer on the scale.



**How to use this scale:**

- Choose a word on the scale that describes what you experience or what you remember.
- Make a mark anywhere on the line by clicking on it. For example, if the sensation you experience is more than "moderate" but not quite "strong," use the mouse to mark on the line between moderate and strong.
- Move the mark until you think it best represents how you feel. You can do this by dragging the arrow.
- When you are happy with the position of the mark press the OK BUTTON.
- The top of the scale, "strongest sensation of any kind," refers to any kind of experience (for example sound, brightness of light), even those sensations that might be painful.

 OK

Public reporting burden for this collection of information is estimated to average 2 1/2 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to: NIH, Project Clearance Branch, 6705 Rockledge Drive, MSC 7974, Bethesda, MD 20892-7974, ATTN: PRA (0925-xxxx\*) EXP: (xx/xxxx). Do not return the completed form to this address.

The anchors for the scale are:

**Strongest Imaginable Sensation of Any Kind; Very Strong; Strong; Moderate; Weak; Barely Detectable; No Sensation**

The on-screen instructions read:

**How to use this scale:**

**Choose a word on the scale that describes what you experience or what you remember**

**Make a mark anywhere on the line by clicking on it. For example, if the sensation you experience is more than “moderate” but not quite “strong”, use the mouse to mark on the line between moderate and strong.**

**Move the mark until you think it best represents how you feel. You can do this by dragging the arrow.**

**When you are happy with the position of the mark, press the OK button.**

**The top of the scale, “strongest imaginable sensation of any kind,” refers to any kind of experience (for example, sound, brightness of light), even those sensations that might be painful.**

**“You can use the mouse pointer to choose a word on the scale that describes what you experience or what you remember. You can click anywhere on the line. For example, if the sensation you experience is more than ‘moderate’ but not quite ‘strong,’ you can use the mouse pointer to mark a spot between moderate and strong.”**

**“Move the mouse pointer until you think it best represents how you feel, and then click on that spot on the scale. If you would like, you can fine-tune your rating by using the up and down arrows on the computer keyboard. When you are happy with the position of the mark, click on the OK button.”**

Once the participant has clicked the OK button, say: “Let’s try some examples.”

Practice Trial 1:

**Say: “Use this scale to rate the brightness of a well-lit room. How strong or intense is the brightness to you? When you are finished, click on the OK button.”**

Practice Trial 2:

**Say: “Please remember the brightness of a dimly lit restaurant, where the only light is from candles on the table. Would you say the strength or intensity of a dimly lit restaurant is less bright or brighter than the light in a well-lit room? Use the scale to rate the brightness of a dimly lit restaurant. When you are finished, click on the OK button.”**

Practice Trial 3:

**Say: “Now think about the brightest light you have ever seen. Use the scale to rate the intensity or strength of the brightest light you have ever seen. When you are finished, click on the OK button.”**

**NOTE: If a participant has difficulty using the mouse or the keyboard, he/she may orally direct the examiner where she/he wants the pointer. When this happens, the examiner should say something like the following to the participant: “You can tell me where you want the pointer and then I will use the mouse and keyboard to choose for you.”**

**If a participant asks about the contents of the cups; the examiner can answer that the liquids are a mixture of salt and water and quinine and water.**

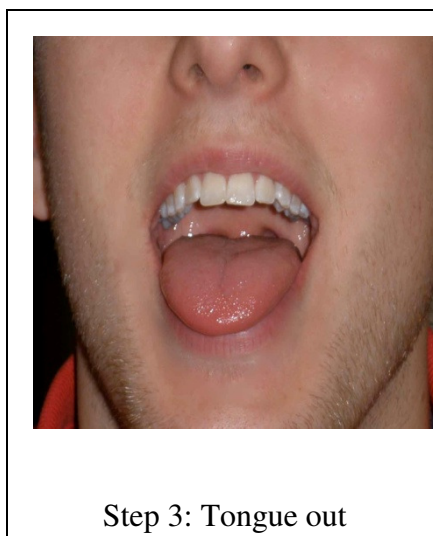
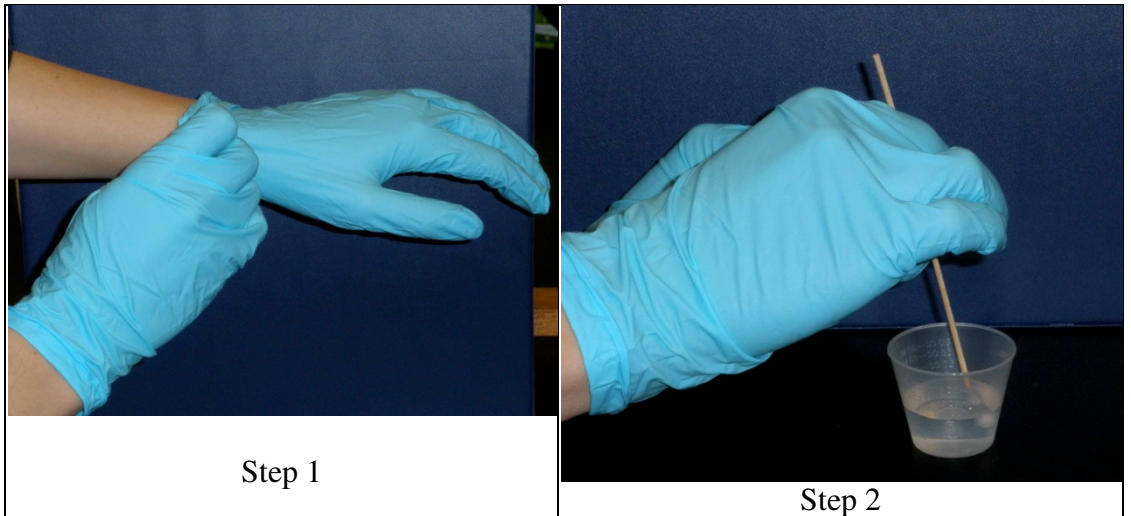
Administration Instructions for Test Items:

There are 4 trials: 1) quinine on the tongue tip and 2) salt on the tongue tip, 3) quinine in the whole mouth, and 4) salt in the whole mouth. The examiner should have a cup of quinine and a cup of salt solution available before beginning the test.

Say: **“Before we begin, please rinse out your mouth two times with the bottled water and then spit the rinse water into this container.”** Continue: **“Now, I am going to ask you to rate the strength of these tastes. First, I will put some of the solution across the tip of your tongue and ask for a rating. To begin, I will put on these gloves.”**

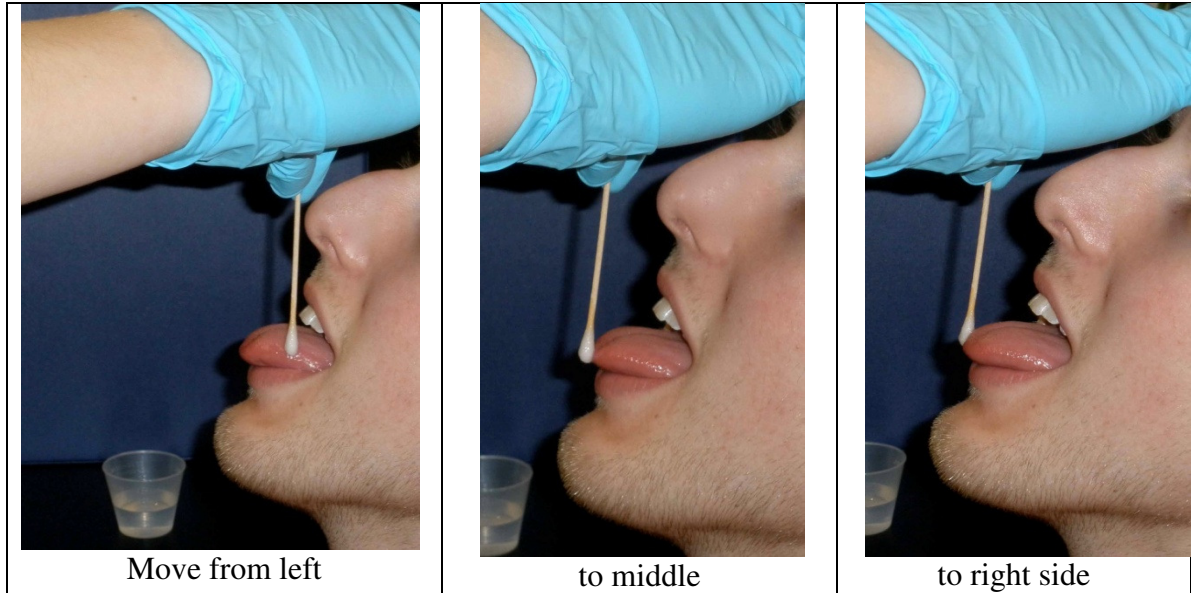
Step 1: The examiner should *put on gloves* for the remainder of this measure.

Step 2: Open the cup of quinine solution and say: **“Then, I will put this cotton swab into the solution.”**



Step 3: Continue: “Please hold your tongue out like this picture. If you want, you can close your lips around your tongue.”.

Say: “As shown in these pictures, I am going to start on your left side and gently put some solution across the tip of your tongue. Please give me the intensity rating right after I apply the taste and before you put your tongue back into your mouth.” The examiner should carefully and gently apply the solution in a slow, continuous motion from the left side of the tongue across the tip and finishing on the right side of the tongue.



Test Item 1:

Using the cotton swab paint the *quinine* on the tip of the tongue as described earlier, and say: “Now, show me the strength or intensity of the taste on the scale you used before. Click the OK button when you are finished.”

Have the participant rinse out his/her mouth with the bottled water between Items 1 & 2, and say: “Please rinse out your mouth two times with the bottled water and spit the rinse water into this container.”

Test Item 2:

Open the container with the salt solution. Using a new cotton swab paint the *salt solution* on the tip of the tongue as described earlier, and say: “Now, show me the strength or intensity of the taste on the scale you used before. Click the OK button when you are finished.”

Have the participant rinse out his/her mouth with the bottled water between Items 2 & 3, and say: “Please rinse out your mouth two times with the bottled water and spit the rinse water into this container.”

Test Item 3;

Hand the participant the small cup with *quinine* and say: “Next, I would like you to sip all of the solution in this cup. Try not to drink the solution, but hold it and gently move it around in your mouth until I tell you to spit it out in this container.”

After the participant sips the solution, the examiner should count for three seconds (one-thousand-one, one-thousand-two, one-thousand-three), and then say: “Spit out the solution in your mouth and swallow whatever remains. Then, rate the strength or intensity of the taste on the same scale you used before. Click the OK button when you are finished.”

Have the participant rinse out his/her mouth with the bottled water between Items 3 & 4, and say: “Please rinse out your mouth two times with the bottled water and spit the rinse water into this container.”

Test Item 4:

Hand the participant the small cup with the *salt solution* and say: “Next, I would like you to sip all of the solution in this cup. Try not to drink the solution, but hold it and gently move it around in your mouth until I tell you to spit it out in this container.”

After the participant sips the solution, the examiner should count for three seconds (one-thousand-one, one-thousand-two, one-thousand-three), and then say: “Spit out the solution in your mouth and swallow whatever remains. Then, rate the strength or intensity of the taste on the same scale you used before. Click the OK button when you are finished.”

**LASTLY:** After the last item is administered, give the participants the bottle of water and encourage them to drink it and/or rinse some more. The examiner should say: “Now that we have finished, you may drink some more water to clean out your mouth.”

**The participant may be offered a candy to help overcome any remaining taste in his or her mouth.**

**[Note: sugar-free candy may be needed for diabetic participants].**