

Question 1 Inserting and adjusting the earplugs

As you insert each earplug (starting with your left ear, then your right ear), talk us through the process.

On a scale of 1 to 5, where 1 is Very uncomfortable and 5 is Very comfortable, how would you rate the comfort during the insertion process?

Please elaborate on why you gave these ratings. [5 point Rating scale: Very uncomfortable to Very comfortable]

Respondent 1

The respondent finds the process of inserting the earplugs more challenging than with the S, especially for their left ear. They report discomfort when the earplug is pressed against the concha (the outer part of the ear). The respondent has a uniquely shaped ear and mentions having bone growth due to excessive swimming as a child. This condition has made their ear canal narrower, leading to discomfort as the earplug tip presses against it. In their right ear, they also experience difficulty finding the correct angle for insertion, and initially don't feel it's properly positioned or providing enough sound attenuation.

Respondent 2

The respondent finds the process of inserting the earplugs less comfortable with the medium size compared to the small size, rating it a 2 out of 5. The earplugs are longer and go deeper into the ear canal, which the respondent finds annoying. They experience difficulty achieving a good fit with the left ear, indicating that the problem might be with the initial scan used for customization. This requires the respondent to make adjustments and tweaks to get a better fit.

Respondent 3

The respondent has a positive experience inserting the earplugs, rating the comfort during this process as a 4 out of 5. They explain that the earplugs slide in easily and create a good seal with a bit of pressure buildup. They also note that they don't feel a significant difference between these earplugs and larger ones they have used.

Respondent 4

The respondent rates the insertion process as quite comfortable, giving it a 4 out of 5. They note that the earplugs fit nicely and do not require excessive twisting to adjust. This suggests that the respondent found the process of inserting the earplugs to be straightforward and comfortable.

Respondent 5

The respondent describes the insertion process as comfortable and natural, emphasizing that the earplugs seal well and quickly, providing an effective barrier against noise. The respondent also compares the experience favorably to using Apple noise-canceling AirPods, which they describe as having a more mechanical feel. The only issue mentioned is the muffled sound of their own voice, which feels unusual to them.

Respondent 6

The respondent rates the comfort during the insertion process at 2 out of 5. The earplug insertion in the right ear is described as not very easy but feasible with a good seal. In contrast, the left ear poses a significant challenge due to a 90 degree bend in the ear canal, causing the respondent pain upon insertion. This difficulty with the left ear significantly lowers the overall comfort rating for this category.

Respondent 7

The respondent describes the insertion process as moderately comfortable, rating it

3 out of 5. They articulate that while the process of insertion isn't the most comfortable, the earplugs feel relatively comfortable once they are in place. The respondent also mentions that the earplugs do not block noise as effectively as they expected, particularly in the case of the right earplug.

Respondent 8

The respondent finds the process of inserting the earplugs to be reasonably comfortable, rating it between 3 and 4 out of 5, but ultimately settling on a rating of 4. They appreciate the clearly marked left and right earplugs, as well as the distinct colors that make identification even easier. They watched instructional videos but found that they could manage quite well even without them.

Respondent 9

The respondent describes the insertion process as a bit of a learning curve, having initially attempted to insert the earplugs in mirror image. However, with practice, they find that the earplugs fit in snugly and guide themselves into place once past a certain point. The comfort level during insertion is rated as 3 out of 5. The respondent mentions some discomfort during the initial part of the insertion process, but states that it becomes more comfortable once the earplugs are properly aligned in the ear canal. Despite this, the respondent criticizes the design of the earplugs, stating that there is nothing to grip on when inserting or removing them, which is a point of discomfort.

Respondent 10

The respondent finds the process of inserting the earplugs somewhat complicated, giving it a rating of 3 out of 5. They believe that finding the right position for the earplugs is a bit of a challenge, but once in place, they feel quite comfortable. The respondent also suggests that a tutorial, like a video, might be needed to properly insert the earplugs.

Respondent 11

The respondent reports significant discomfort while inserting the earplugs, mentioning that they do not seem to fit properly in either ear. The process of insertion is described as a hassle and the respondent points out that the earplugs don't provide much to hold onto during this stage. This results in a quite uncomfortable insertion experience.

Respondent 12

The respondent reports a comfortable and easy insertion process for both earplugs. The process provides a good seal and a comfortable experience, and the respondent seems pleasantly surprised, mentioning that the earplugs feel better than they thought. Despite the comfortable insertion, the respondent notes that the markings on the earplugs are not particularly durable, with the mark on the right earplug already starting to fade.

Respondent 13

The respondent experiences high levels of comfort with the earplug in the left ear, rating it as 5 out of 5. The comfort is such that they believe they could sleep with the earplug in the left ear. After a while, they almost forget that the earplug is in their ear. However, they mention experiencing slight discomfort while talking, as the earplug pushes into the ear canal.

Respondent 14

The respondent describes the insertion process as uncomfortable and slightly painful, particularly when the earplug twists inside. They struggle to achieve a good seal, especially in the right ear, indicating difficulties in fitting and

adjusting the earplugs properly.

Respondent 15

The respondent finds the process of inserting the earplugs to be relatively straightforward and comfortable, rating it a 4 out of 5. They report that the insertion process becomes easier with practice. However, they had some difficulty inserting the earpick into the right ear, which lowered the comfort rating slightly. Furthermore, they note that the earplugs do not seem to block noise as effectively as the Loop quiet earplugs they have previously used.

Question 2 Left ear comfort

Now that you've had the earplug in your left ear for a few minutes, on a scale of 1 to 5, where 1 is Very uncomfortable and 5 is Very comfortable, how comfortable is it?

Do you feel any discomfort, and if so, where in the left ear canal?

Outer ear canal

Middle ear canal

Deep ear canal

If you don't know, don't worry! Just explain why you gave this rating. [5 point Rating scale: Very uncomfortable to Very comfortable]

Respondent 1

The comfort level in the left ear is low, with the respondent rating it a 3 out of 5. They report an extreme discomfort in the inner ear due to the earplug pressing against the narrow ear canal caused by bone growth. The pain was severe enough that they decided to remove the earplug.

Respondent 2

The comfort of the left earplug, once inserted, is rated as 3 out of 5. While the insertion process is found to be uncomfortable due to the depth, the respondent does not experience significant discomfort once the earplug is in place. They describe feeling an overall circumferential pressure that is similar to that felt with the small-sized earplugs. However, the fit of the left earplug seems to be suboptimal, requiring occasional readjustments.

Respondent 3

After having the earplug in the left ear for a short time, the respondent rates the comfort as a 4 out of 5. They note a little more pressure buildup in the left ear compared to the right, but believe that the left earplug provides a better overall seal.

Respondent 4

In terms of comfort in the left ear, the respondent rates it as 4 out of 5. They had used the earplugs previously before the test, which might have contributed to their comfort level. They report experiencing no discomfort, which indicates that the earplugs are a good fit for the left ear.

Respondent 5

The respondent rates the comfort of the earplug in the left ear as 4 out of 5. Despite describing the overall experience as comfortable, they note a certain tightness, especially when moving the head or speaking. This sensation is not confined to the left ear; they also feel it in the right ear. Although they don't specify whether this pressure is in the outer, middle, or deep ear canal, the feeling of tightness prevents them from rating the comfort level as perfect.

Respondent 6

The comfort level of the earplug in the left ear is extremely low, primarily due to pain in the middle ear canal and the deepest part of the ear. The respondent

implies that the shape of the earplug doesn't match the structure of their ear canal, leading to discomfort. The outer ear canal does not cause any discomfort, but the issues with the middle and deep ear canal make the overall comfort quite low.

Respondent 7

The respondent reports no discomfort in the left ear and states that the earplug feels very comfortable. However, they do express concern about the earplug potentially slipping out when they move their ear. They do not feel the earplug in any part of the ear canal—outer, middle, or deep—unless they apply pressure. Despite these minor concerns, the respondent rates the left ear comfort as very high.

Respondent 8

The comfort level of the earplug in the left ear is rated lower, at 2 out of 5. Initially, the respondent experienced a pressing, stiff feeling, which they found surprising given that the earplugs were custom made. The discomfort seemed to alleviate slightly after wearing the earplugs for about 20 minutes, but it resurfaced later on. The discomfort seems to be localized more in the middle of the ear canal.

Respondent 9

The left earplug fits very comfortably for the respondent, exerting only a slight pressure on the middle ear canal. They describe it as feeling very snug, although they are aware of its presence. The comfort of the earplug in the left ear is rated as 4 out of 5, as they believe a more comfortable earplug would be less noticeable.

Respondent 10

The respondent experiences a reasonable level of comfort with the earplug in the left ear, rating it a 4 out of 5. They describe a sensation of squeezing while inserting the earplug, but they don't find it painful or particularly uncomfortable. They note that this feeling is similar to the experience with other custom earplugs they have tried.

Respondent 11

The left earplug was rated as quite uncomfortable, scoring a 2 out of 5. The respondent felt as though a piece of cartilage in their ear was being pushed out, leading to the feeling that the earplug didn't fit properly or securely. They felt the need to adjust the earplug and push it deeper into the ear canal, but were hesitant due to fears of the earplug getting stuck. They also felt that if they were to wear the earplug while sleeping, it would fall out.

Respondent 12

The respondent rates the comfort of the left earplug as 4 out of 5. They report a minor discomfort in the deep ear canal, but stress that it is barely noticeable. Despite this, the respondent perceives the right earplug as slightly more comfortable than the left one.

Respondent 13

The respondent experiences high levels of comfort with the earplug in the left ear, rating it as 5 out of 5. The comfort is such that they believe they could sleep with the earplug in the left ear. After a while, they almost forget that the earplug is in their ear. However, they mention experiencing slight discomfort while talking, as the earplug pushes into the ear canal.

Respondent 14

The comfort of the earplug in the left ear is described as tolerable but not ideal. The respondent reports a degree of discomfort in the middle ear canal, but not too

deep. They don't consider the experience to be overly bad, suggesting a moderate level of discomfort that can be endured.

Respondent 15

The comfort level of the earplug in the left ear is high, with the respondent finding it super comfortable. While it stays in place well, the respondent points out that it doesn't fully block noise.

Question 3 Right ear comfort

Similarly, rate the comfort of the earplug in your right ear.

On a scale of 1 to 5, where 1 is Very uncomfortable and 5 is Very comfortable, how comfortable is it?

Do you feel any discomfort, and if so, where in the right ear canal?

Outer ear canal

Middle ear canal

Deep ear canal

If you don't know, don't worry! Just explain why you gave this rating. [5 point

Rating scale: Very uncomfortable to Very comfortable]

Respondent 1

The comfort level in the right ear is slightly better than the left but still uncomfortable. The respondent experiences pressure in the deep ear canal and even the tragus, causing discomfort in the whole ear. Similar to the left ear, the respondent decided to remove the earplug due to the discomfort.

Respondent 2

The comfort level of the right earplug is also rated as 3 out of 5, echoing the experience with the left ear. The respondent does not distinguish between the comfort levels of the left and right ear, suggesting a similar experience with both.

Respondent 3

The comfort level of the earplug in the right ear is rated lower, at 3 out of 5. The respondent reports feeling a bit more pressure in the middle ear canal, especially at the bottom. This discomfort is noted primarily because it differs from the sensation in the left ear.

Respondent 4

Similarly, for the right ear, the respondent also rates the comfort level as 4 out of 5. They had also used the earplugs in the right ear before the recording and found them to be rather comfortable, suggesting a consistent level of comfort in both ears.

Respondent 5

The comfort level for the right ear is also rated as 4 out of 5, similar to the left ear. The respondent reiterates the feeling of tightness in the right ear. They describe the outer, middle, and deep ear areas as comfortable, but the overall tightness seems to lower the comfort score.

Respondent 6

The respondent rates the comfort of the earplug in the right ear as 4 out of 5, suggesting a significantly better experience compared to the left ear. Despite a bit of pressure, the respondent finds the right earplug quite comfortable and suitable for longterm wear. The seal remains good even when moving the jaw, which contributes to the high comfort rating for the right ear.

Respondent 7

Like the left earplug, the right earplug is also reported to be very comfortable. The respondent notes that the right earplug doesn't seem to seal properly or block

noise effectively, but it doesn't cause any discomfort. Again, they only feel the earplug when they apply force to it.

Respondent 8

The comfort level of the earplug in the right ear is similar to that of the left ear, but slightly more uncomfortable. The respondent experienced the same pressing feeling as in the left ear. After removing the earplugs, they still felt some lingering discomfort, indicating that the right earplug might have been a bit too tight for their preference.

Respondent 9

The comfort level of the earplug in the right ear is also rated as 4 out of 5. The respondent mentions that the right earplug doesn't fit as comfortably at first, and requires some adjustment. Once adjusted, however, they feel it is at a similar level of comfort as the left earplug.

Respondent 10

The comfort of the earplug in the right ear is rated similarly to the left, at 4 out of 5. The respondent reports that the earplug feels quite large and seems to push more into the canal, possibly the middle part, which may cause some discomfort. However, they affirm that it's not painful or truly uncomfortable.

Respondent 11

The right earplug was also rated as quite uncomfortable, scoring a 2 out of 5. Though it felt like a better fit compared to the left earplug, the respondent still experienced discomfort, with the feeling of cartilage being pushed out. The respondent also expressed concern that the earplug would fall out if they moved too much or while sleeping.

Respondent 12

The right earplug receives a perfect comfort rating of 5 out of 5. The respondent describes it as fitting like a glove with no issues at all.

Respondent 13

The comfort level of the earplug in the right ear is rated slightly lower, at 4 out of 5. The respondent reports a minor discomfort in the deep ear canal as the earplug seems to push into it, but they also note that they can adapt to this sensation over time.

Respondent 14

The comfort of the earplug in the right ear is described as very uncomfortable, more so than the left ear. The respondent notes that this discomfort is felt more in the outer ear canal. The twisting motion of the earplug seems to cause a significant amount of discomfort in the right ear.

Respondent 15

The respondent finds the right earpick less comfortable than the left one, rating it a 3 out of 5. They identify the beginning of the ear canal and more towards the inside as areas of discomfort. They also mention that the earpick pushes against the tragus, causing it to move out of its natural position, contributing to the lower comfort rating.

Question 4 Duration on comfort

Based on your current experience, how long do you think you could comfortably wear these earplugs?

Respondent 1

Given the discomfort experienced, the respondent states that they couldn't wear the earplugs for more than an hour. The pain was too intense, making prolonged use

infeasible.

Respondent 2

Despite initial expectations that the mediumsized earplugs would be more uncomfortable, the respondent feels that they could wear these earplugs for a few hours before needing a break, the same duration given for the smallsized earplugs. They note that they continuously feel the earplugs in their ears.

Respondent 3

The respondent suggests that they could wear the earplugs for a longer period, but they express uncertainty about this. They recall a previous experience with larger earplugs where, despite not experiencing discomfort while wearing them, they felt a bit weird after removing them. Therefore, the respondent anticipates they could comfortably wear these earplugs for a few hours, but plan to test this assumption later.

Respondent 4

The respondent believes they could wear the earplugs for a few hours at a time before needing a break. This preference seems to be a general experience for the respondent with any items placed in their ears, rather than a discomfort specific to these earplugs. The respondent seems to prefer periods of time without the sensation of earplugs in their ears.

Respondent 5

The respondent believes that they could comfortably wear the earplugs for a few hours at a time before needing a break. This is due to the fact that they feel they need to speak louder while wearing the earplugs, which could become exhausting over longer periods. They also express concern about potentially misunderstanding others while wearing the earplugs, which might make continuous usage impractical.

Respondent 6

The discomfort in the left ear heavily impacts the duration the respondent can wear the earplugs, limiting it to less than an hour. The left earplug is described as causing so much pain that the respondent would want to remove it as soon as possible. The respondent notes that it doesnt make sense to only wear one earplug, suggesting that the discomfort in the left ear effectively determines the overall wear duration.

Respondent 7

The respondent believes they could wear the earplugs for a full workday (8+ hours), even though they normally wouldnt do so. They explain that this is possible because the earplugs do not block noise very well, allowing them to hear clearly. However, they express doubt about being able to sleep with the earplugs in, as they would feel them and they do not block noise sufficiently.

Respondent 8

Given the discomfort described, the respondent believes that they could not wear these earplugs comfortably for more than a few hours. They also mention feeling as if they were still wearing the earplugs even after taking them out, which contributes to their assessment that wearing the earplugs for a long duration would be uncomfortable.

Respondent 9

The respondent feels that they could comfortably wear the earplugs for a few hours at a time, but would need a break after that. They express uncertainty about being able to wear them for a full workday of 8 hours, as they predict that the earplugs could cause sweat or wax buildup. They note that they could probably wear them for more than 8 hours while sleeping, but not while awake.

Respondent 10

The respondent indicates that they could wear the earplugs for a few hours but would need a break afterward. They make it clear that they mainly used these earplugs for sleeping and found them quite comfortable for that purpose. However, one earplug fell out during the night, and they decided to remove the other one at that point. The respondent suggests that the question about duration of comfort should consider a full nights wear rather than a full days wear.

Respondent 11

The respondent expresses an immediate desire to remove the earplugs, not because they are painful, but because they do not fit comfortably. The constant need to adjust the earplugs and the associated mental energy required is deemed bothersome. This wasnt due to pain, but rather because the earplugs didnt fit comfortably, which led to a sensory issue.

Respondent 12

The respondent believes they could comfortably wear the earplugs all day and even sleep with them if necessary. They mention that the earplugs are unobtrusive, cause no pressure points, and dont stick out of the ear. They also speculate that the earplugs would be comfortable to wear while sleeping, although they havent yet tested this with a pillow.

Respondent 13

While the earplugs are comfortable, the respondent feels that they could only wear them for a few hours at a time before needing to take a break. They cite two reasons for this: first, the left earplug causes minor discomfort when they talk, and second, the earplugs attenuate sound to such a degree that conversing with someone becomes difficult. Therefore, they believe that they would not be able to wear the earplugs all day.

Respondent 14

The respondent states that they could only wear the earplugs comfortably for less than an hour. They recount that they tried wearing the earplugs a few times, but after 20 to 30 minutes, the discomfort became too much and they had to remove the earplugs each time.

Respondent 15

The respondent doesnt believe they could comfortably wear the earplugs all day. They have tried sleeping with them and found it to be tolerable, but they dont think they could wear them during a workday or for extended periods during waking hours. Although the exact duration isnt specified, the respondent indicates that they would wear them only for sleeping, not during the day

Question 5 Final thoughts

Respondent 1

In conclusion, the respondent states that the earplugs are not a good fit for them. Despite trying, they couldnt get the earplugs in deep enough without causing significant pain, particularly in the left ear. The narrowness of their ear canal due to bone growth contributes to the discomfort. Overall, these earplugs are not suitable for this respondent due to the pain and discomfort they cause.

Respondent 2

In conclusion, the respondent prefers the smallsized earplugs over the mediumsized ones due to the deeper insertion required by the latter, which is found to be more annoying. The respondent also mentions a sharp bend in their ear canal that necessitates additional effort to insert the mediumsized earplugs. The fit of the

left earplug is not satisfactory, requiring the respondent to occasionally readjust it to maintain a good seal. The respondent suggests that both sizes might be slightly oversized for their ears.

Respondent 3

The respondent seems to find the earplugs generally comfortable and easy to insert, despite some minor discomfort in the right ear and possible aftereffects. This suggests that while the earplugs are suitable for shortterm use, their suitability for longterm wear remains to be tested.

Respondent 4

The respondent finds the earplugs to be surprisingly comfortable, noting that they provide better sound attenuation than another product theyve used, the Loop Quiet. Despite this, they express that the overall feel of the earplugs appears somewhat cheap, and they also have reservations about the carry case. Despite these minor drawbacks, the respondents overall experience with these earplugs appears to be positive, especially in terms of comfort and sound attenuation.

Respondent 5

In their final comments, the respondent gives a positive review of the earplugs, stating they would prefer them over noisecanceling Apple phones when needing to focus. They also mention that the earplugs provide superior noise cancellation and a better seal than the Loop Quiet earplugs. Despite some minor issues, they find the earplugs comfortable and pleasant to wear, ending their response with a positive affirmation: I love them honestly. Well done.

Respondent 6

The respondent believes that custommolded earplugs have potential benefits, as demonstrated by the good fit and comfort in the right ear. However, the poor fit and resulting pain in the left ear make the current earplugs largely unusable. The respondent stresses the need for better scanning and modeling techniques to ensure a proper fit. They express skepticism about the current ability of such techniques to produce consistently comfortable and wellfitted earplugs. They note that in many cases, the earplugs may not fit properly or could cause discomfort, thus reducing their usability.

Respondent 7

In conclusion, the respondent feels that the earplugs are comfortable enough to wear for an extended period, but they dont fulfill their primary need, which is noise blocking. They also note that they wouldnt be suitable for use with overear headphones. While the earplugs are comfortable, they seem to fall short of the respondents expectations in terms of functionality, particularly regarding noise attenuation.

Respondent 8

In their final thoughts, the respondent expresses disappointment, as they had expected more comfort from the custommade earplugs. They speculate that their expectations might have been too high, leading to the perceived discrepancy between their expectations and their actual experience. Despite the discomfort, they seem to appreciate the easy identification and insertion process of the earplugs.

Respondent 9

In their closing remarks, the respondent makes several observations. They mention that the earplugs cause an echo in their head and do not seem to attenuate sound as effectively as other earplugs they have used. They also express a dislike for the insertion process and the lack of a grip for removing the earplugs. The respondent adds that any deviations from the position the ear canal was in when the scan was

done (such as smiling or talking) can affect the fit and the level of sound attenuation. Overall, they seem to view these earplugs as suitable for situations where they can stay still.

Respondent 10

In conclusion, the respondent finds the earplugs quite suitable for sleeping due to their high attenuation and reasonable comfort. However, they express concerns about the size of the earplugs, suggesting that they are quite large, and this leads to a sensation of pressure in the ear. They also note that the process of inserting the earplugs is rather difficult and could be improved, perhaps by providing a tutorial video. Despite these issues, they find the earplugs quite satisfactory for their intended purpose, which is to provide a quiet sleep environment.

Respondent 11

The respondent concludes their feedback by expressing dissatisfaction with the process of inserting and removing the earplugs, stating that there is not much to hold onto during these processes. They also reiterate concerns about the earplugs falling out with excessive movement or during sleep. The respondent suggests that their discomfort might be partially due to being accustomed to a different type of earplug (loops) that fits and seals differently. Nonetheless, they find the current earplugs less than ideal.

Respondent 12

In conclusion, the respondent notes a few minor issues with the earplugs. They point out that the markings wear off quickly, and that the earplugs could be somewhat difficult to remove due to their concave shape and lack of material to grab onto. However, they also see this feature as a potential advantage for sleeping, as there's less material to cause pressure points against a pillow. Despite these minor issues, the respondent is impressed with the overall fit and comfort of the earplugs in both ears. They describe the fit as better than they thought, which suggests that the earplugs exceeded their initial expectations.

Respondent 13

In conclusion, the respondent recommends practice for comfortable insertion and removal of the earplugs. They also caution against excessive talking while wearing the earplugs due to the potential discomfort it might cause. Overall, despite some minor discomforts, the respondent appears to find the earplugs quite beneficial and comfortable for use over shorter periods of time.

Respondent 14

The respondent finds the earplug removal process difficult. This difficulty is particularly pronounced due to their larger fingers and small nails, which makes grasping and pulling the earplugs out challenging. They even report experiencing painful sound when the earplug snaps back into the ear during failed removal attempts. The respondent suggests adding more surfaces to grab onto the earplugs or even a stick at the end to aid in the removal process.

Overall, this respondent experienced discomfort during insertion and while wearing the earplugs, and also has trouble with removal. These issues suggest potential areas for product improvement, such as making the earplugs easier to insert and remove, and enhancing the comfort levels, especially in the right ear.

Respondent 15

In conclusion, the respondent feels that the earplugs do provide some noise blocking, but not as effectively as the Loop quiet earplugs they are used to. They note that the left earplug is more comfortable, especially for side sleeping, and doesn't cause pressure on the concha like the Loop quiet earplugs do. However, the

right earplug causes some discomfort by pushing against the tragus. Overall, while they appreciate some aspects of the earplugs, such as reduced pressure in the ear, the respondent indicates that they wouldnt choose to wear them during the day due to comfort issues.