Echo devices are designed to detect only your chosen wake word (Alexa, Amazon, Computer, or Echo). The device detects the wake word by identifying acoustic patterns that match the wake word. No audio is stored or sent to the cloud unless the device detects the wake word (or Alexa is activated by pressing a button). On certain devices, you can invoke Conversation Mode, which allows you to speak to Alexa without having to use a wake word while Conversation Mode is on. You can also configure supported Echo devices to detect specific sounds, such as the sound of smoke alarms, carbon monoxide alarms, and glass breaking.

Google Assistant is designed to wait in standby mode until it detects an activation, like when it hears "Hey Google." In standby mode, the device processes short snippets of audio (a few seconds) to detect an activation (such as "Hey Google"). If no activation is detected, then those audio snippets won't be sent or saved to Google. Once it detects an activation, Assistant exits standby mode and sends your request to Google servers. This can, for example, happen if there is a noise that sounds like "Hey Google," or an unintended manual activation.

My wonder is what happens when the tv mentions the wake word?