

# Genium Study Summaries

The summaries are organized in three levels depending on the detail of information. The overview table (Level 1) lists all the relevant publications dealing with a particular product (topic) as well as researched categories (e.g. level walking, safety, activities, etc). The Level 2 summaries list all relevant information on the device concerning a specific category (e.g. level walking, safety, activities, etc.).

For those interested to learn more about individual studies, the Level 3 summaries give a compact and concise summary of the relevant reference.

| Reference         |       | Category                 |               |                     |                                |                  |                              |               |                              |                                    |                  |
|-------------------|-------|--------------------------|---------------|---------------------|--------------------------------|------------------|------------------------------|---------------|------------------------------|------------------------------------|------------------|
|                   |       | Functions and Activities |               |                     |                                |                  |                              |               |                              | Participation                      | Environment      |
| Author            | Year  | <u>Level walking</u>     | <u>Stairs</u> | <u>Ramps, Hills</u> | <u>Uneven ground Obstacles</u> | Cognitive demand | Metabolic Energy Consumption | <u>Safety</u> | <u>Activity Mobility ADL</u> | <u>Preference Satisfaction QoL</u> | Health economics |
| <u>Klenow</u>     | 2024  | x                        |               |                     |                                |                  |                              | x             | x                            |                                    |                  |
| <u>Mileusnic*</u> | 2021  | x                        | x             | x                   |                                |                  |                              |               | x                            | x                                  |                  |
| <u>Hahn*</u>      | 2020  |                          |               |                     |                                |                  |                              | x             | x                            | x                                  | x                |
| <u>Lura</u>       | 2017  |                          | x             |                     |                                |                  |                              |               |                              |                                    |                  |
| <u>Hahn</u>       | 2016  | x                        | x             | x                   | x                              | x                | x                            | x             | x                            |                                    |                  |
| <u>Highsmith</u>  | 2016c |                          |               |                     |                                |                  |                              |               | x                            |                                    |                  |
| <u>Highsmith</u>  | 2016b |                          | x             |                     |                                |                  |                              | x             | x                            | x                                  | x                |
| <u>Highsmith</u>  | 2016a |                          |               | x                   |                                |                  |                              |               |                              |                                    |                  |
| <u>Huppert*</u>   | 2016  | x                        | x             | x                   |                                |                  |                              | x             | x                            | x                                  |                  |
| <u>Bell</u>       | 2016  |                          |               | x                   |                                |                  |                              |               |                              |                                    |                  |
| <u>Schalk**</u>   | 2015  |                          |               |                     |                                |                  |                              |               | x                            | x                                  |                  |
| <u>Lura</u>       | 2015  | x                        |               | x                   |                                |                  |                              |               |                              |                                    |                  |

|                           |       |           |           |           |          |          |          |           |          |          |          |
|---------------------------|-------|-----------|-----------|-----------|----------|----------|----------|-----------|----------|----------|----------|
| <u>Aldridge Whitehead</u> | 2014  |           | x         |           |          |          |          |           |          |          |          |
| <u>Highsmith</u>          | 2014c |           |           |           |          |          |          |           |          | x        |          |
| <u>Highsmith</u>          | 2014b | x         |           |           | x        |          |          | x         |          |          |          |
| <u>Highsmith</u>          | 2014a |           | x         | x         | x        |          |          |           |          |          |          |
| <u>Kannenbergr</u>        | 2013  | x         | x         | x         | x        |          |          | x         | x        |          |          |
| <u>Bellmann</u>           | 2012b | x         | x         | x         |          |          |          | x         |          |          |          |
| <u>Bellmann</u>           | 2012a |           | x         |           |          |          |          |           |          |          |          |
| <u>Blumentritt</u>        | 2012  | x         | x         | x         |          |          |          | x         |          |          |          |
| <u>Kampas</u>             | 2011  | x         | x         | x         | x        |          |          | x         |          |          |          |
| <b>Total number: 20</b>   |       | <b>10</b> | <b>12</b> | <b>11</b> | <b>5</b> | <b>1</b> | <b>1</b> | <b>10</b> | <b>9</b> | <b>6</b> | <b>2</b> |
| *Review                   |       |           |           |           |          |          |          |           |          |          |          |
| ** Case study             |       |           |           |           |          |          |          |           |          |          |          |