

# Understanding Deviation Ratios (dR)

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The LSA Pro and Balance Systems are bio-communication devices, facilitating the transfer of information between a computer and a human body. This is accomplished after the person places his hand on the hand cradle and the computer detects it. Several times each second the circuitry inside the hand cradle measures galvanic skin response (GSR) at each of the contact points. The software operator then instructs the computer to conduct what is called a Bio-Survey.

A Bio-Survey consists of a series of discreet time periods. During the first period a baseline is calculated. Next, the computer outputs a stimulus, called a virtual stressor, and then measures the body's response. The response is compared to the baseline and any variation is noted. This process is repeated until the Bio-Survey is complete.

Proprietary algorithms are involved at each step of the Bio-Survey. Since they are proprietary, their expression required its own terminology which we named "deviation Ratio" or "dR". dR is not expressive of any common mathematical calculation (i.e. standard deviation, etc) and applies only to ZYTO technology. dR is a comparative, numerical representation of the body's response to the stimulus.

- dR Indicates a stress response.
- + dR Indicates a balance response.
- 0 dR Indicates no reaction (the baseline and response were the same).

## Is one dR good and another bad?

No, the +dR is not 'better' than a -dR.



## How the dR is applied:

1. Bio-Surveys intended to identify items that may be antagonistic to the body are initiated using the Stressor icon. (This applies only to the LSA Pro, the Balance automatically does this and does not have a Stressor icon). The dRs further from zero are significant (both + and -). Those further from zero represent a significant response, thus the more antagonistic the stimulus (virtual stressor).
2. Bio-Surveys intended to identify items that may be therapeutic or balancing to the body are initiated using the Balance icon. (This applies only to the LSA Pro, the Balance automatically does this and does not have a Balance icon). The dRs with the most positive number are most significant. Positive dRs indicate a balance response.
3. Bio-Surveys intended to identify items that the body sees as 'inert' are initiated using either the Stressor or Balance icons (This applies only to the LSA Pro and not Balance). Those dRs at or closest to zero are also significant, because the body shows no response.

