Massage Balances ANS in Children in Intensive Care Units

Research undertaken in the BC Children's Hospital between 2010 and 2012 revealed that hand and foot massages help balance the autonomic nervous systems (ANS) of seriously ill or injured children. This research revealed sustained regulation of stress-induced ANS dysfunction in the participants after receiving repeated half-hour hand and foot massage sessions separated by 60-90 minutes.

The autonomic nervous system plays a main role in managing stress and the resulting inflammatory responses. Excess stress on an individual can overstimulate the body's sympathetic nervous system (our "fight-or-flight response") and can also suppress the parasympathetic nervous system (which is the "rest and digest" system).

The research used changes in heart rate frequency and heart rate variability (which are both indicators of ANS function) to conclude that massage therapy increases the PNS and modifies the balance between the PNS and SNS. The researchers also found long-term ANS stabilizing benefits in the children that lasted many hours after their final treatment.