

Tupler Technique® Program Results, 2009-2014

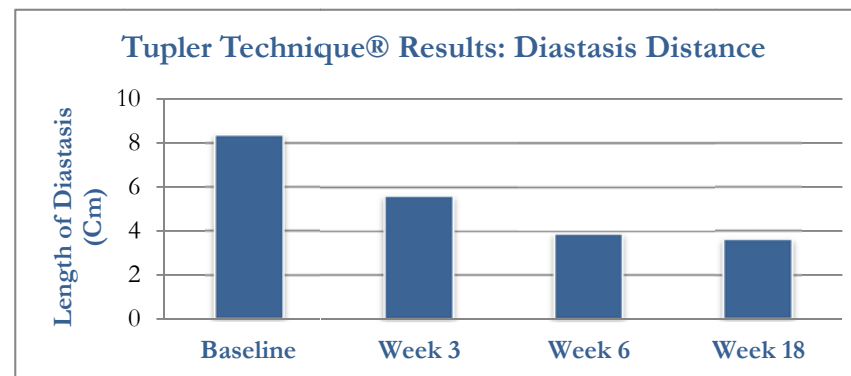
Diastasis Distance

Number of Clients	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	% Decrease, Week 1-18
1203	8.384	5.621	3.887	3.657	56.38%

*Results represent mean of three sub-measurements (distance over the **top**, **middle**, and **bottom** of diastasis) across five subgroups (**vaginal birth**, **C-section**, **VBAC**, **no pregnancies**, and **men**) occurring between 2009 and 2014

***Diastasis distance on bottom** had the highest average decrease of **58.30%**

***P-value < .0001** for difference in means between Week 1 and Week 18



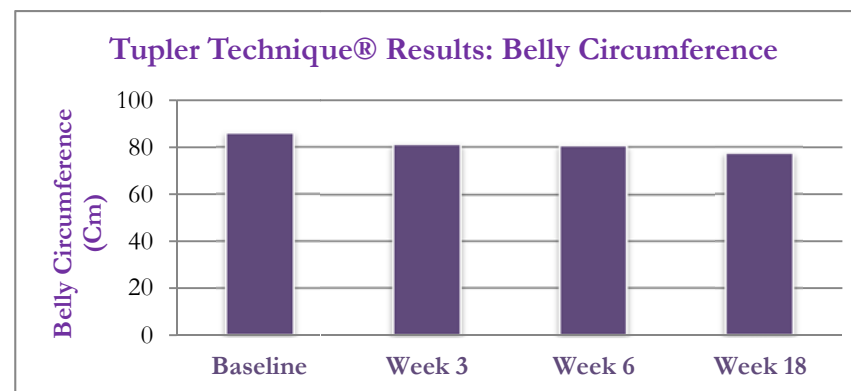
Belly Circumference

Number of Clients	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	% Decrease, Week 1-18
912	86.001	81.183	80.672	77.493	9.89%

*Represents mean results of three sub-measurements (**top**, **middle**, and **bottom** belly circumference) across five subgroups (**vaginal birth**, **C-section**, **VBAC**, **no pregnancies**, and **men**) occurring between 2009 and 2014

***Belly circumference in middle** had the highest average decrease of **12.60%**

***P-value = 0.0148** for difference in means between Week 1 and Week 18



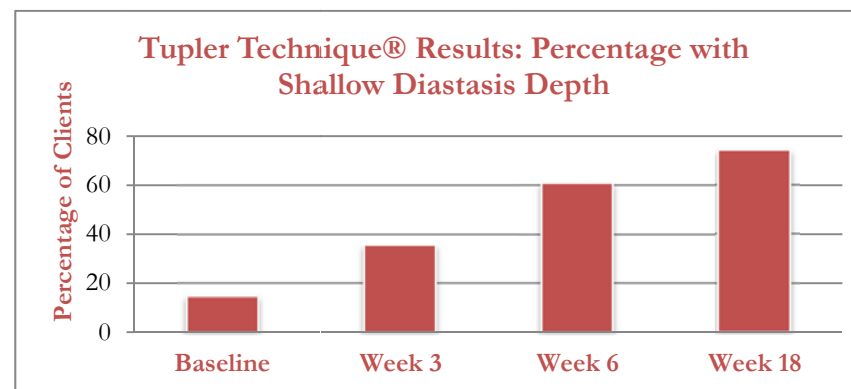
Percentage of Clients with Shallow (0-3cm) Depth

Number of Clients	Baseline (%)	Week 3 (%)	Week 6 (%)	Week 18 (%)	% Decrease, Week 1-18
1215	14.72%	35.52%	60.83%	74.21%	59.49%

*Represents mean results of three sub-measurements (distance over the **top**, **middle**, and **bottom** of diastasis) across five subgroups (**vaginal birth**, **C-section**, **VBAC**, **no pregnancies**, and **men**) occurring between 2009 and 2014

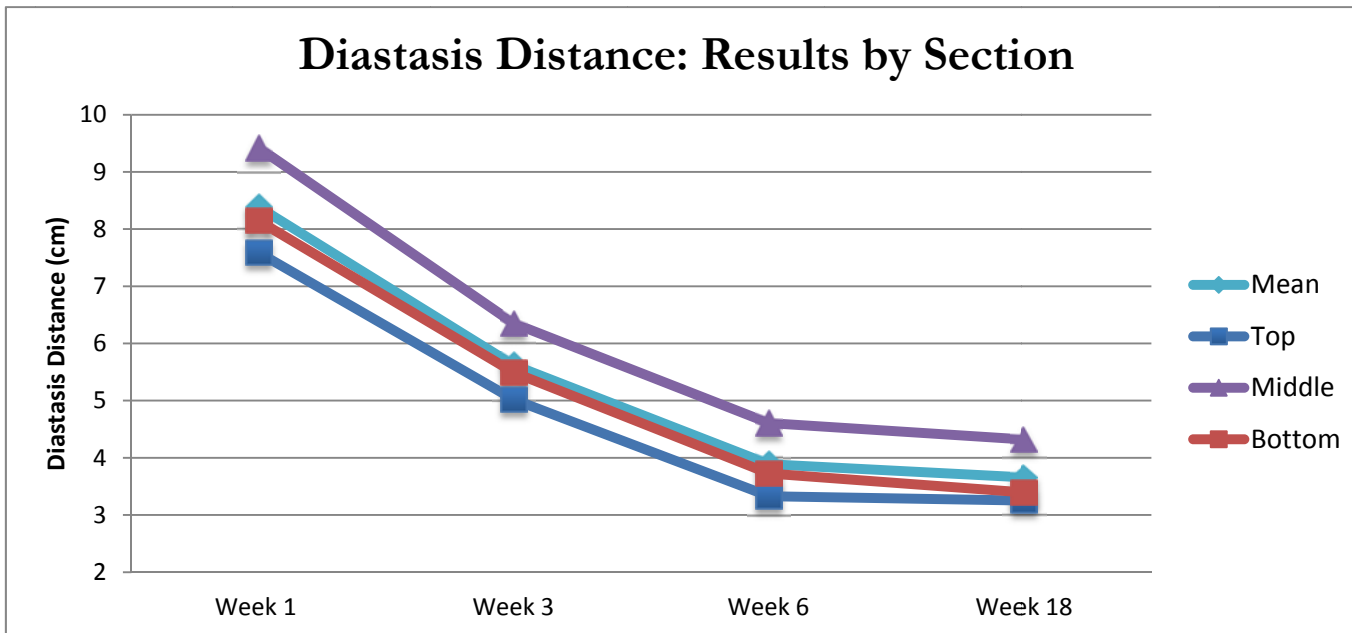
***Diastasis top depth** had the highest average increase of **56.09%**

***P-value < .0001** for difference in means between Week 1 and Week 18

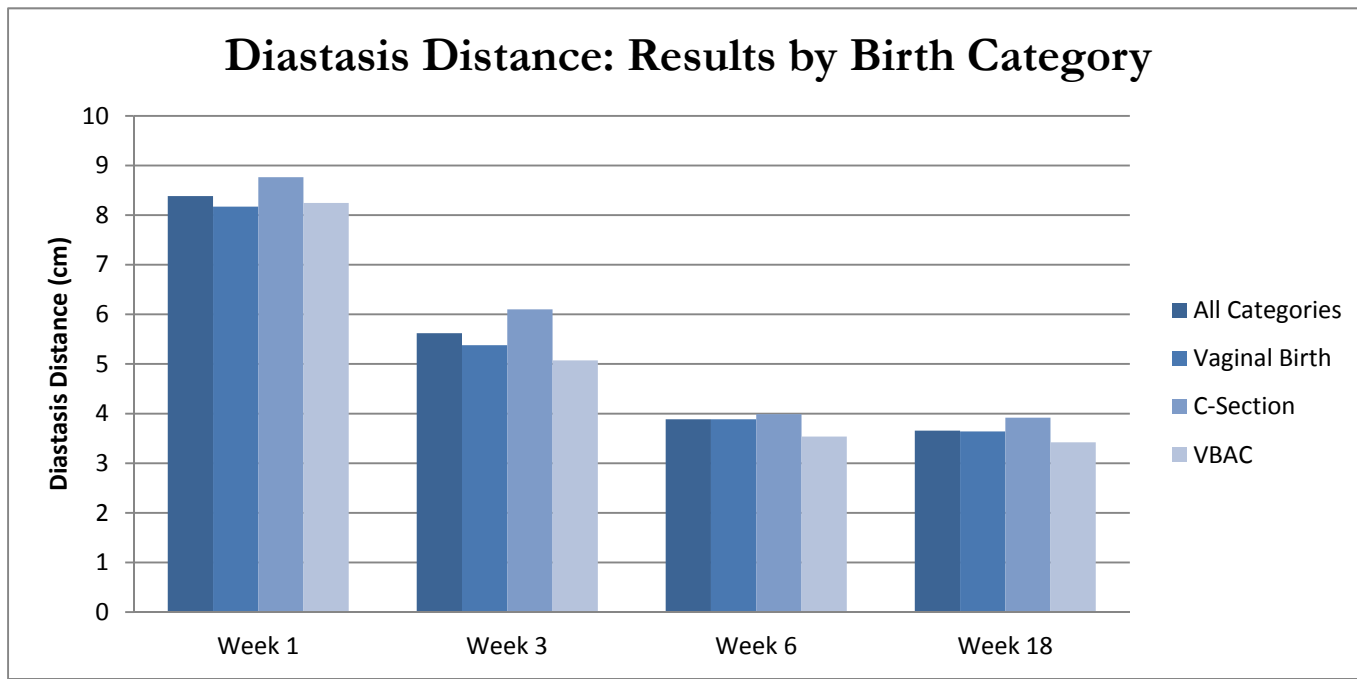


DIASTASIS DISTANCE: Tupler Technique® Program Results, 2009-2014

DIASTASIS SECTION	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Top	7.588	5.019	3.328	3.252	57.14%
Middle	9.419	6.351	4.607	4.322	54.12%
Bottom	8.142	5.492	3.725	3.395	58.30%
Mean (all observations)	8.384	5.621	3.887	3.657	56.38%



BIRTH CATEGORY	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Vaginal Birth	8.169	5.377	3.886	3.639	55.45%
C-Section	8.765	6.102	3.990	3.918	55.29%
Vaginal after C-Section	8.246	5.073	3.536	3.420	58.53%



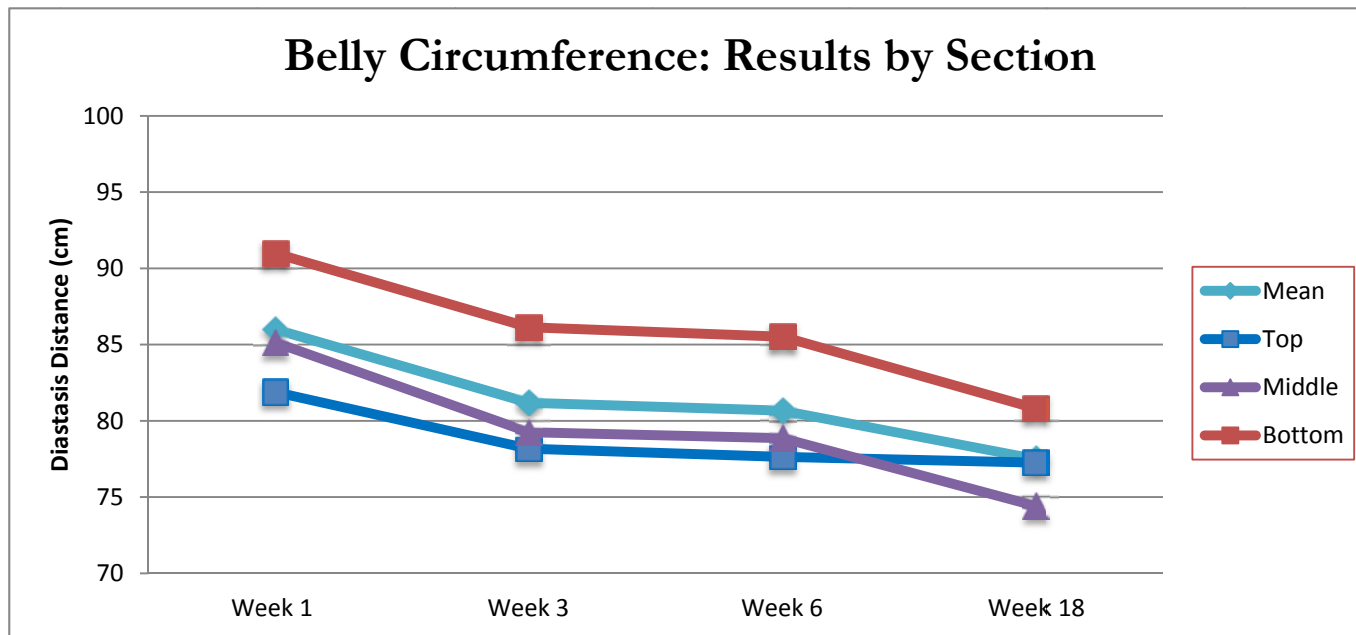
BIRTH CATEGORY: Vaginal Birth	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Top	7.276	4.749	3.372	3.363	53.78%
Middle	9.091	6.069	4.409	4.050	55.45%
Bottom	8.143	5.313	3.879	3.505	56.95%
Mean (all sections)	8.169	5.377	3.886	3.639	55.45%

BIRTH CATEGORY: C-Section	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Top	8.135	5.349	3.435	3.15	61.28%
Middle	10.017	6.953	4.875	4.669	53.39%
Bottom	8.143	6.005	3.660	3.938	51.65%
Mean (all sections)	8.765	6.102	3.990	3.918	55.29%

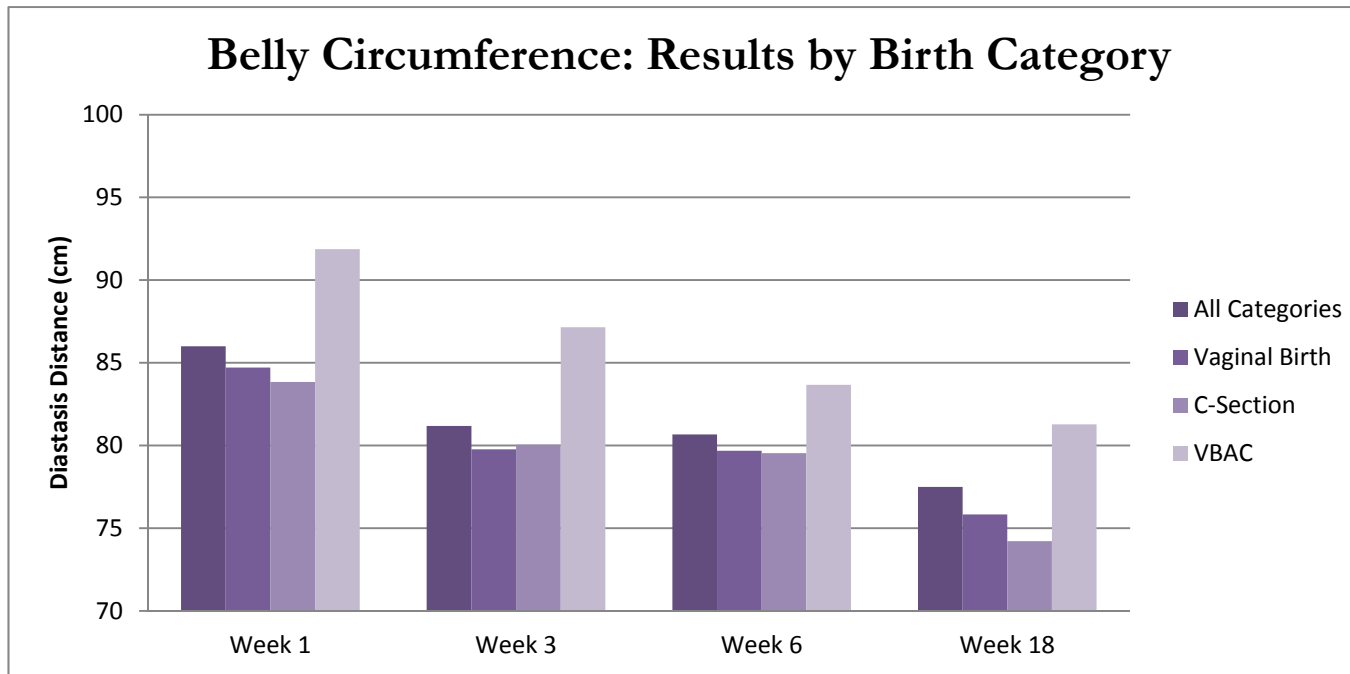
BIRTH CATEGORY: Vaginal Birth after C-Section	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Top	7.198	4.270	2.732	3.600	49.99%
Middle	9.239	5.796	4.545	4.500	51.30%
Bottom	8.301	5.151	3.332	2.16	73.98%
Mean (all sections)	8.246	5.073	3.536	3.420	58.53%

BELLY CIRCUMFERENCE: Tupler Technique® Program Results, 2009-2014

DIASTASIS SECTION	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Top	81.881	78.167	77.633	77.2616	5.64%
Middle	85.137	79.246	78.867	74.408	12.60%
Bottom	90.985	86.138	85.513	80.808	11.18%
Mean (all observations)	86.001	81.183	80.672	77.493	9.89%



BIRTH CATEGORY	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Vaginal Birth	84.709	79.768	79.680	75.830	10.48%
C-Section	83.838	80.055	79.535	74.218	11.47%
Vaginal after C-Section	91.866	87.146	83.667	81.275	11.53%



BIRTH CATEGORY: Vaginal Birth	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Top	80.1668	76.285	76.849	77.154	3.76%
Middle	83.745	77.2889	77.599	71.007	15.21%
Bottom	90.216	85.731	84.592	79.329	12.07%
Mean (all sections)	84.709	79.768	79.680	75.830	10.48%

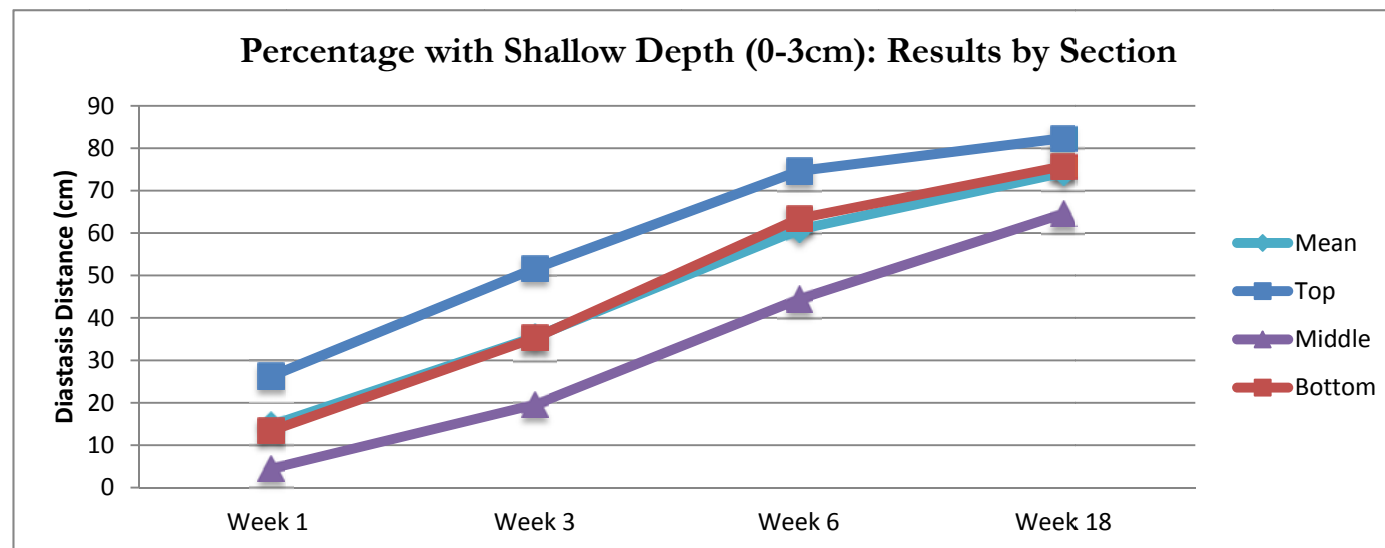
BIRTH CATEGORY: C-Section	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Top	79.882	77.127	76.298	75.185	5.88%
Middle	83.206	78.858	77.871	71.680	13.85%
Bottom	88.426	84.181	84.436	75.791	14.29%
Mean (all sections)	83.838	80.056	79.535	74.219	10.93%

BIRTH CATEGORY: Vaginal Birth after C-Section	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, % Decrease
Top	87.827	84.786	79.508	79.873	9.06%
Middle	90.726	84.961	82.335	77.935	14.10%
Bottom	97.046	91.692	89.158	86.017	11.37%
Mean (all sections)	91.867	87.146	83.667	81.275	11.529%

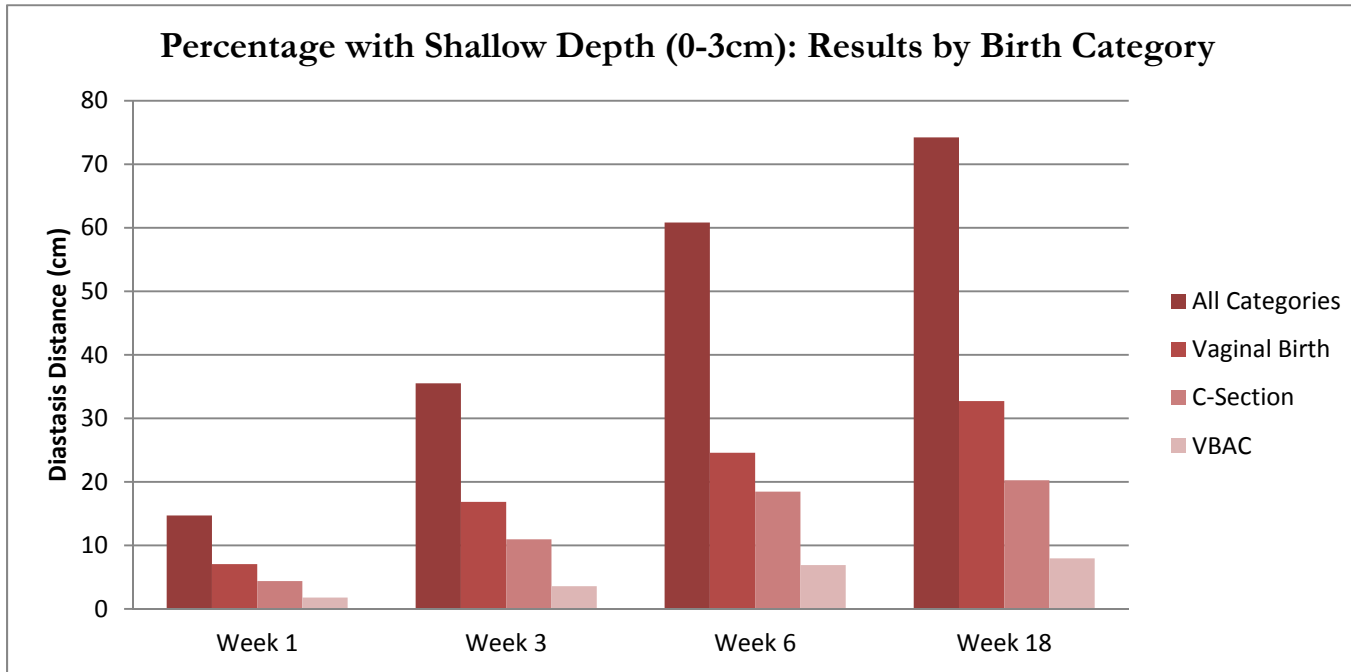
DIASTASIS DEPTH: Percentage of Clients with Shallow Depth (0-3cm)

Tupler Technique® Program Results, 2009-2014

DIASTASIS SECTION	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, Percentage Point Increase
Top	26.26%	51.67%	74.62%	82.35%	56.09%
Middle	4.48%	19.59%	44.44%	64.52%	60.04%
Bottom	13.41%	35.31%	63.45%	75.76%	62.35%
Mean (all observations)	14.72%	35.52%	60.83%	74.21%	59.49%



BIRTH CATEGORY	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, Percentage Point Increase
Vaginal Delivery	7.06%	16.84%	24.58%	32.73%	25.67%
C-Section	4.39%	10.95%	18.46%	20.24%	15.86%
Vaginal Birth after C-Section	1.79%	3.57%	6.91%	7.97%	6.18%



BIRTH CATEGORY: Vaginal Delivery	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, Percentage Point Increase
Top	13.53%	22.67%	31.99%	35.90%	22.37%
Middle	1.64%	9.00%	15.59%	33.33%	31.69%
End	6.01%	18.84%	26.15%	28.95%	22.94%
Mean (all sections)	7.06%	16.84%	24.58%	32.73%	25.67%

BIRTH CATEGORY: C-Section	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, Percentage Point Increase
Top	7.69%	15.33%	22.06%	25.64%	17.95%
Middle	1.10%	6.33%	13.69%	16.67%	15.57%
Bottom	4.37%	11.19%	19.62%	18.42%	14.05%
Mean (all sections)	4.39%	10.95%	18.46%	20.24%	15.86%

BIRTH CATEGORY: Vaginal Delivery after C-Section	Baseline (cm)	Week 3 (cm)	Week 6 (cm)	Week 18 (cm)	Weeks 1-18, Percentage Point Increase
Top	2.92%	5.67%	8.46%	7.69%	4.77%
Middle	1.37%	2.33%	4.18%	8.33%	6.96%
Bottom	1.09%	2.71%	8.08%	7.89%	6.80%
Mean (all sections)	1.79%	3.57%	6.91%	7.97%	6.18%

Statistical Outcomes and Insights: Tupler Technique® Program Results, 2009-2014

Client Demographics

- The vast majority of Tupler Technique® clients are **women who have either given birth vaginally (45.59%) or via C-Section (36.27%)**. Women who have had a vaginal birth after a C-section (commonly known as “VBAC”) represented the third-largest group (12.09%).
- **Only 6.05% of clients had not given birth** – these clients were either men, women who had not been pregnant, or women who were currently pregnant.

Program Results

- Of the three observed measurements (diastasis distance, belly circumference, and diastasis depth), clients experienced **the most dramatic reductions in diastasis distance**. Across all demographics, clients decreased their distance by 55-60% throughout the course of the program.
- Among diastasis sections, clients experienced the **largest reductions in the middle and on bottom for belly circumference and in the middle for diastasis depth**. For diastasis distance, no discernible pattern was detected.
- **For diastasis distance, clients experienced the most substantial outcomes in the first six weeks of the program**. In the first three weeks (Weeks 1-3), clients reduced their diastasis by approximately 30-35%. They reduced their diastasis by another 30-35%, on average, in the next three weeks (Weeks 3-6). By contrast, between Week 6 and Week 18, clients only reduced their distance by 5-10%.
- **For belly circumference and diastasis depth, clients experienced consistent reduction throughout the course of the program**. Between each benchmark, clients lost roughly 5% of their belly circumference on average. By the same token, the proportion of clients who had achieved “shallow” diastasis depth (0-3cm) continually increased by 15-20 percentage points throughout the program.
- Diastasis outcomes for all three client subcategories are comparable. Given their diastasis depth, distance, and belly circumference reductions, **each subcategory (vaginal birth, C-section, VBAC) experienced approximately equal benefits from the program**.

Tupler Technique® Program Results: Frequently Asked Questions (FAQ)

Q: How was diastasis distance measured?

A: Diastasis distance was measured by the number of fingers that Tupler Technique® practitioners could spread horizontally across the patient's diastasis. To approximate finger width, this number was multiplied by 1.8, the mean adult finger width observed in the following studies:

- Johnson, Peter, and Sharon Blackstone. "Children and Gender—differences in Exposure and How Anthropometric Differences Can Be Incorporated into the Design of Computer Input Devices." *Scandinavian Journal of Work and Health* 3 (2007): 26-32.
- Dandekar, Kiran, Balasundar Raju and Mandayam Srinivasan. "3-D Finite Element Models of Human and Monkey Fingertips to Investigate the Mechanics of Tactile Sense." *Journal of Biomechanical Engineering* 125.5 (2003): 682-91.
- Chandra, Arunesh, Pankaj Chandna, and Surinder Deswal. "Analysis of Hand Anthropometric Dimensions of Male Industrial Workers of Haryana State." *International Journal of Engineering* 29.2 (2011): 163 – 182.

Q: For the last measurement, what does “shallow” indicate?

A: At every step in the program, clients' diastasis depth is measured and recorded. The depth is recorded as *Shallow* (corresponding to 0-3 cm), *Medium* (corresponding to 3-6 cm), or *Deep* (corresponding to 6-7 cm). *Shallow* is the most desirable measurement, for obvious reasons – it is the outcome that clients are striving to attain. The chart displays the proportion of clients that had “shallow” depth initially, then illustrates how that population grew significantly throughout the program. By the end, approximately 60% of clients had the desired “shallow” diastasis distance.

Q: What kind of statistical test did you use in order to arrive at your P-value?

A: A paired t-test was used in order to analyze the two groups of means. The paired t-test was employed because the data was available to measure each client's result “before” and “after” the training program. Thus, each client effectively served as his or her own control.

Q: What is a P-value and what do the P-values for your results indicate?

A: A P-value is the probability of getting our results *purely by chance* - that is, if the Tupler Technique® exerted zero influence on the data. The smaller the P-value, the greater the evidence that the Tupler Technique® did indeed influence clients' final measurements. Generally, the results are considered “significant” if $P > .01$. In this analysis, for each diastasis measurement (diastasis distance, belly circumference, and diastasis depth), P-values were substantially less than .01. These p-values serve as strong evidence to support the hypothesis that the Tupler Technique® program impacted clients' reductions in their diastasis.