Food & Health in Washington, DC

A Study by Mari Gallagher Research & Consulting Group

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Fact Sheet

1. In many areas, the D.C. food environment presents a serious health and wellness challenge to the city's most vulnerable residents.

2. 88% of the over 520 food retailers in D.C. are unhealthy "fringe" food retailers; only 12% are "mainstream". Mari Gallagher Research & Consulting Group (MG) coined these terms in 2006.

3. Mainstream (or healthy) stores offer a variety of foods that support a nutritious diet on a regular basis. Fringe food retailers primarily sell food that is fast, readymade, boxed, canned or processed, all of which is generally high in salt, fat and sugar, and has limited, if any, nutritional value.

4. Nearly 200,000 D.C. residents live on blocks where the closest healthy food retailer is 3 times farther or more than the closest fringe food retailer, creating a condition called "Food Imbalance" that MG coined in 2007. For these residents, we found large and statistically significant negative health impacts with all diet-related diseases, especially cardiovascular disease and diabetes. The average Food Imbalance ratio for all D.C. blocks is 14, meaning that – to reach the closest healthy food store – you must travel 14 times farther than the

closest fringe food store. This relates to a body of work MG developed called the Convenience Food Factor: people generally choose food closest to them even though they might desire or require, for medical reasons, more distant but healthier food.

5. Over 35,000 D.C. children live on blocks where healthy food retailers are over 3 times farther than the closest fringe food retailer. This is a relatively small percentage of the total population suffering from Food Imbalance, but it is still a large absolute number.

6. Minorities, however, represent 73% of the nearly 200,000 D.C. residents that live in areas where a healthy food retailer is at least 3 times farther than the closest fringe food retailer. As conditions worsen, the share of minorities who suffer increases, and the impact increases. For example, roughly 38,000 total residents live 8 times farther or more from a mainstream food store compared to a fringe food store and, of those residents, 77% are minorities.

7. To understand the impact of Food Imbalance, consider that in areas in D.C. where the closest healthy food retailer is only twice as far as the closest unhealthy fringe food retailer (meaning the Food Imbalance ratio is 2, rather than 3 or more, as discussed above), an additional 22 years of collective life is lost from diet-related diseases compared to neighborhoods where healthy and unhealthy food stores are equally close (meaning that the ratio in those cases is 1, which is called Food Balance).

8. Next we discuss Healthy Food Access (the straight-line distance from each block to the closest mainstream food store) rather than Food Balance (the ratio of distance between fringe food stores to mainstream food stores for each block). Over 60,000 D.C. residents live 0.8 to 1.5 miles from the nearest healthy food retailer. Based on our analysis of citywide market patterns, the minimum “equity” distance in D.C. should be 0.8 miles. For many reasons, this might not always be achieved, but we see it as the standard benchmark.

9. Poor access to healthy food stores in D.C. – again, identified as 0.8 to 1.5 miles – is linked to increased diet-related death. But, surprisingly, even moderate access matters in D.C. For example, residents who live just 0.6 miles from the closest mainstream grocer are also more likely to die prematurely from diet-related diseases, especially cardiovascular disease, than residents with better access, even after controlling for other key factors. As the distance

increases, the impact intensifies. So while 0.8 miles is the market or equity threshold, 0.6 is the public health impact threshold for the general public.

10. The most alarming finding, however, is that D.C. babies whose mothers reside just a half-mile from the closest healthy grocer have a 10% increase in the probability of being born overweight than babies born to mothers in the immediate vicinity of healthy grocers. As distance increases, the impact increases. Here is the breakout by distance ranges:

Mother's distance to the closest healthy grocery store	Number of children born to these mothers yearly	Percentage of total births	INCREASED probability of being born overweight due to food environment
Under a half-mile	4,940	66.06	7% of children are born overweight because of a variety of factors, but there is no *additional* contribution of overweight from the food environment
.50 to .74	1,263	16.89	7.7% of children are born overweight, a 10% increase over the baseline risk
.75 to .99	1,164	15.57	8.05% of children are born overweight, a 15% increase over the baseline risk
1.0 or more	110	1.48	8.40% of children are born overweight, a 20% increase over the baseline risk

Note: Newborn overweight is defined by the Centers for Disease Control as weighing more than 4,000 grams. This yearly projection was based on analyzing 5 years of individual birth data, from 2003 to 2007. We controlled for gestational age and the mother's income, residence, education, age, alcohol and tobacco use, prenatal care, and marital status. The actual number of births in 2012, and the percentages affected, would likely vary, but we would expect the additional contribution of overweight to be close to this projection.

11. High birth weights directly correlate to increased likelihoods of adult obesity and diabetes, as well as infant mortality and childhood obesity.

12. Healthy grocery stores attract other quality retailers, providing jobs and economic development opportunities, and generally contribute to improved public health. This is part of a body of work developed by MG in 2006 called the “Snowball Effect”. Retail attracts retail, and like attracts like, in either a positive or negative direction.

13. Economic and health costs associated with Healthy Food Access and Food Balance inequities will increase the financial burden to

employers and government agencies. Of even greater concern, these inequities will likely impact quality and length of life for many D.C. residents. For some children, it could mean starting life at an immediate disadvantage.

14. As we all need to eat to live as part of the human condition, food is our common denominator as people. Good food strategies can create a unifying call for action that transcends race, place, class, and politics.

15. There is not one single problem or solution to food environment inequalities. Everyone can make a positive contribution to the good food movement. This means you!

16. Healthy food environments are necessary and important foundations to build upon; we cannot choose healthy food unless we have access to it. Once we do have access, other factors that drive individuals to make unhealthy food choices still can come into play. Behaviors do not change overnight. We all have a lot of work to do. Thankfully, many different community, policy, government, and market leaders and organizations in D.C. are already working on aspects of this complicated and urgent problem.

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