Asthma Project Goals: Decrease hospitalizations Decrease use of asthma medications Increase peak flow readings Improve quality of life Decrease doctor visits

Patient ID #:

Patient Name:

Age: \_\_\_\_\_

Date:

# **Glen Ellyn Pharmacy Complementary Asthma Management Program** Initial Visit

- 1. At what age were you diagnosed with asthma? □ 5-11 yrs  $\Box$  0-4 yrs □ 12-19 yrs  $\Box$  20-35 yrs  $\Box$  36-49 yrs  $\Box$   $\geq$ 50 yrs
- 2. Do you have a family history of asthma?  $\Box$  Yes  $\Box$  No
- 3. How many asthma related symptoms do you have in a week?  $\Box > 2$  days/week, but not daily  $\Box \leq 2$  days/week  $\Box$  Throughout the Day  $\Box$  Daily
- 4. How many times do these symptoms wake you up during the night?  $\Box$  3-4x/month  $\Box > 1$  x/week, but not daily  $\Box \leq 2x/month$  $\Box$  Often 7x/week
- 5. How often do you use your "rescue" inhaler?  $\Box$  > 2days/week, but not >1x daily  $\Box \leq 2$  days/week  $\Box$  Daily  $\Box$  Several times a day
- 6. What type of interference do these symptoms have with your daily activities? □ None □ Minor limitations  $\Box$  Some limitation □ Extremely limited
- 7. How many asthma attacks (shortness of breath, wheezing, coughing, prolonged expiration, rapid heart beat, chest tightness and/or chest pain) have you had in the past 12 months?  $\Box$  0-2/year  $\square >2/year$
- 8. Have you been hospitalized during any of these attacks? □ Yes  $\square$  No
  - If Yes, please briefly explain the extent of hospitalization.
- 9. Are you currently using any medications for asthma?  $\Box$  Yes  $\Box$  No

If Yes, please list all of the medications below.

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10. Check off any of the following that are triggers for your asthma.
□ Exercise □ Viral infections □ Animal dander □ House dust mites □ Dust
$\Box$ Mold $\Box$ Smoke $\Box$ Pollen $\Box$ Changes in weather
□ Strong emotional expression (crying, laughing, etc) □ Airborne chemicals
□ Menses □ Medications (NSAIDs, Aspirin, beta-blockers) □ Stress/Anxiety
$\Box$ GERD $\Box$ Other
11. Do you monitor your asthma with a Peak Flow Meter?
$\Box$ Yes $\Box$ No
If Yes, what is your personal best reading? Date?
12. Do you have any allergies?
$\Box$ Yes $\Box$ No
If Yes, what are you allergic to?
$\Box$ Dairy $\Box$ Wheat $\Box$ Peanuts/Nuts $\Box$ Wine $\Box$ Chocolate
Outdoor Allergons (nollen mold spores onimal dender dust mites atc)
□ Outdoor Allergens (pollen, mold spores, animal dander, dust mites, etc)
□ Eggs □ Soy □ Seafood □ Bees/Wasps □ Laundry detergents
□ Eggs □ Soy □ Seafood □ Bees/Wasps □ Laundry detergents □ Medications (Please List )
□ Eggs □ Soy □ Seafood □ Bees/Wasps □ Laundry detergents
Eggs       Soy       Seafood       Bees/Wasps       Laundry detergents         Medications (Please List       )         Other
Eggs       Soy       Seafood       Bees/Wasps       Laundry detergents         Medications (Please List       )       )         Other       )       )         13. Do you have a family history of allergies?
Eggs       Soy       Seafood       Bees/Wasps       Laundry detergents         Medications (Please List       )         Other
<ul> <li>Eggs □ Soy □ Seafood □ Bees/Wasps □ Laundry detergents</li> <li>□ Medications (Please List)</li> <li>□ Other</li> <li>13. Do you have a family history of allergies?</li> <li>□ Yes □ No</li> </ul>
<ul> <li>Eggs □ Soy □ Seafood □ Bees/Wasps □ Laundry detergents</li> <li>□ Medications (Please List)</li> <li>□ Other</li> <li>13. Do you have a family history of allergies?</li> <li>□ Yes □ No</li> <li>14. Were you born via a:</li> </ul>
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References:

1. *Expert Panel Report 3: Guidelines for the diagnosis and management of asthma*. National Asthma Education and Prevention Program. National Heart, Lung, and Blood Institute, 2007. Available from: <u>http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm</u>

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## Glen Ellyn Pharmacy Complementary Asthma Management Program Follow-up Week 5

- 1. In the past 4 weeks, how much of the time did your asthma keep you from getting as much done at work or at home?
  - $\Box$  None of the time (5)  $\Box$  A little of the time (4)  $\Box$  Some of the time (3)
  - $\Box$  Most of the time (2)  $\Box$  All of the time (1)
- 2. During the past 4 weeks, how often have you had shortness of breath?
  □ Not at all (5) □ 1 or 2x/week (4) □ 3-6x/week (3) □ Once a day (2)
  □ More than 1x/day (1)
- 3. During the past 4 weeks, how often did your asthma symptoms (wheezing, coughing, shortness of breath, chest tightness or pain), wake you up at night or earlier than usual in the morning?
  □ Not al all (5)
  □ Once or twice (4)
  □ Once a week (3)
  □ 2-3 nights/week (2)
  - $\Box$  4 or more nights/week (1)
- 4. During the past 4 weeks, how often have you used your rescue inhaler or nebulizer medication (such as Albuterol, Ventolin, Proventil?)

 $\square \text{ Not at all (5)} \square \text{ Once a week or less (4)} \square 2-3x/\text{week (3)} \square 1-2x/\text{day (2)} \\ \square 3 \text{ or more } x/\text{day (1)}$ 

5. How would you rate your asthma control during the past 4 weeks?
Completely controlled (5)
Poorly controlled (2)
Not controlled at all (1)

\*\*Add up total from 1<sup>st</sup> five questions, then classify asthma control from NAEPP Guideline chart (Age  $\geq 12$ )\*\*

- 6. How many capsules per day of the Florajen3 did you start off using?
- 7. How many capsules per day of the Florajen3 are you currently using?

If this number is different from question #6, please explain how you increased your capsule intake per day or per week.

- 8. How many <sup>1</sup>/<sub>4</sub> teaspoon doses per day of the FOS powder did you start off using?
- 9. How many <sup>1</sup>/<sub>4</sub> teaspoon doses per day of the FOS powder are you currently using?

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If this number is different from question #8, please explain how you increased your powder intake per day or per week.

10. Please list all asthma related symptoms that you have experienced and explain if they have improved or become worse over the past 4 weeks.

11. Have you see any improvement in other health conditions that you may have? (i.e. autoimmune disorders, allergies, gastrointestinal disorders, etc)
□ Yes
□ No

If Yes, please explain the health condition and the improvement you have experienced.

- 12. At this time, would you feel comfortable <u>decreasing</u> the use of your asthma medications and continuing with your Florajen3/FOS regimen with your physician's permission?
  □ Yes □ No
- 13. At this time, would you feel comfortable <u>discontinuing</u> the use of your asthma medications and continuing with your Florajen3/FOS regimen with your physician's permission?
  □ Yes
  □ No

References:

1. *Expert Panel Report 3: Guidelines for the diagnosis and management of asthma*. National Asthma Education and Prevention Program. National Heart, Lung, and Blood Institute, 2007. Available from: http://www.nhlbi.nih.gov/guidelines/asthma/asthgdln.htm

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### Glen Ellyn Pharmacy Complementary Asthma Management Program Follow-up 1<sup>st</sup> Week

- 1. On a scale of 1-10, with 1 being the worst and 10 being the best, overall how do you feel?
- 2. On a scale of 1-10, with 1 being poorly controlled and 10 being well controlled, how do you feel your asthma symptoms are being controlled?
- 3. Have you taken at least one capsule/day of Florajen3 on an empty stomach with non-chlorinated water or juice for the past week?

 $\Box$  Yes  $\Box$  No

If No, how many capsules have you taken this week?

Have you taken at least ¼ teaspoonful/day of the FOS powder for the past week?
 □ Yes
 □ No

If No, how much FOS powder have you used this week?

5. Have you experienced any side effects from the FOS/Florajen3 therapy in the past week? □ Yes □ No

If Yes, please explain what side effects have occurred? How would you rate each of these side effects, using minor, moderate, or severe.

6. What was your most recent peak flow reading from this past week?

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# Glen Ellyn Pharmacy Complementary Asthma Management Program

# **Asthma and Probiotics Fact Sheet**

## Asthma Facts

- More than 22 million people have asthma in the United States
- Asthma accounts for about 15 million outpatient clinic visits and 2 million ER visits each year
- Asthma is a serious chronic illness among children and is the 3<sup>rd</sup> ranking cause of hospitalization among children under 15
- Asthma in children is the cause of seven million physician visits and about 200,000 hospitalizations
- > 1 out of every 13 school-aged children has asthma
- According to the National Heart Lung and Blood Institute, annual expenditures for health and lost productivity due to asthma are estimated at \$19.7 billion

# **Probiotics**

- ➢ "Pro" − promoting
- ➤ "biotic" life

## What are they?

- Cultures of friendly, beneficial, "good" bacteria that live in our digestive tract and are essential to our health
- > Our digestive tract needs to have a balance of "good" and "bad" bacteria
- If too many harmful bacteria and yeast multiply and take up the majority of space in our digestive tract, various diseases and infections can ensue
- Supplementing with probiotics, such as *Florajen3*, allows the beneficial bacteria to be reintroduced into our digestive tract and take up space so that harmful bacteria and yeast cannot over grow
- > Prebiotics, such as *FOS*, are food for the good bacteria that help them to multiply faster

## What role do they have in treating/preventing asthma?

- > Probiotics are essential for our immune system to function properly
- > Our immune system can produce overreactions, such as inflammation
- The immune system can become so oversensitive that it tries to fight harmless substances such as dust, animal dander, and dairy, causing an allergic response
- > Asthma is a chronic condition in which the airways are inflamed and narrowed
- > Asthma is due to an inappropriate immune response, which causes inflammation of the airways
- > Probiotics can help the immune system develop T cells that regulate inflammation
- In asthmatics, probiotics may decrease allergy and asthma symptoms by blocking the synthesis of inflammatory and allergic chemical mediators associated with allergy and asthma symptoms. Lactobacillus may stimulate increased production of IL-10, which turns off allergic proinflammatory components

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# What does the literature say about asthma and probiotics?

- Studies have shown relationships between the development of asthma and lower numbers of "good" bacteria in the gut
- According to a study in the *Lancet*, *Lactobacillus GG* was effective in preventing early atopic disease (eczema, allergic rhinitis, asthma) in children with a high risk
- Various clinical studies over the past 10 years have shown that good bacteria in the gut are major, essential factors in the maturation of the immune system to a non-allergic mode.
- Literature supports that diet modification and synbiotic supplementation therapy will control yeast and fungal overgrowth. This will control asthma and respiratory symptoms.

References:

- 1. <u>www.epa.gov</u>. Asthma Facts Sheet
- 2. Gary Huffnagle. The Probiotics Revolution
- 3. Kelly Karpa. "Bacteria for Breakfast: Probiotics for Good Health." 2003.
- 4. Kalliomakia M, Salminen S, Arvilommi H, Kero P, Koskinen P, Isolauri E. Probiotics in primary prevention of atopic disease: a randomised placebo-controlled trial. *The Lancet*. 2001; 357:1076-1079.
- 5. Kalliomakia M, Isolauri E. Pandemic of atopic diseases a lack of microbial exposure in early infancy? *Curr Drug Targets Infect Disord*. 2002; 2(3): 193-199.

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# Glen Ellyn Pharmacy Complementary Asthma Management Program

Includes:

1 on 1 invaluable counseling time with the pharmacist Introduction about incorporating diet and nutrition into asthma management Overview of the use of probiotics for asthma

1 week follow-up

5 week follow-up

AND

2 months supply of synbiotic therapy (Florajen3 and FOS)

all for **<u>\$95.00</u>**